



Date: _____

County of San Diego, Planning & Development Services **COMMERCIAL BUILDING CODE PLAN CHECK** *BUILDING DIVISION*

*** CUSTOMER INFORMATION VERSION ***

Commercial and public accommodation projects

The items listed below are commonly omitted from plans submitted for review. Advance preparation by applicants to satisfy these requirements will help expedite the plan review process. Be advised: Just as specific items on this list may not apply to specific projects, this list also does not necessarily include all requirements for all projects; other items may apply. Please use this list as a guide only.

A. GENERAL REQUIREMENTS

- Each of the items on this list requires correction before a permit will be issued. The approval of plans and specifications does not permit the violation of any section of the building code, county ordinances, or state law. The following list does not necessarily include all errors and omissions. (See the 2013 *California Building Code* 105.4)
- The following supplements may be required for approval. Compliance with these items must be obtained prior to permit issuance:
 - ☐ Accessibility correction lists: _____
 - ☐ Stormwater Intake Form (LUEG:SWa) and Minor Stormwater Management Plan (LUEG:SWb)
 - ☐ Sample stormwater BMP presentation (PDS #272)
 - ☐ Eave construction guidance document (PDS #198)
 - ☐ Special inspection summary (PDS #006)
 - ☐ List of approved special inspection agencies and construction material testing laboratories
 - ☐ Other : _____
- Please read your Conditions of Approval list.** We recommend **contacting the fire district early** in the project design stage to determine potential requirements. **Note: All plan approval stamps** -- e.g., this building code review, planning, fire -- **must be applied to the same two sets** to enable permit issuance; coordinate any submittals to the fire district with this in mind to minimize stamp transfers to revised sets. Additionally we recommend you retain all previously reviewed sets until permit issuance.
- Plans must incorporate the necessary information on printed sheets. Plans in pen or pencil, with crossed out or taped on information, or with white-out will not be accepted.

B. PLAN REQUIREMENTS

- Specify on plans the project will comply with the following building codes and associated County of San Diego amendments:
 - ☐ 2013 *California Building Code* (CBC)
 - ☐ 2013 *California Green Building Standards Code* (CalGreen)
 - ☐ 2013 *California Electrical Code* (CEC)
 - ☐ 2013 *California Mechanical Code* (CMC)
 - ☐ 2013 *California Plumbing Code* (CPC)
 - ☐ 2013 *California Fire Code* (CFC)
 - ☐ 2013 *California Building Energy Efficiency Standards* (CBEES)
- On sheet ____ provide an itemized "Scope of Work" describing the work to be performed and identifying the buildings and structures included under this permit.
- Scope of work on plans does not match scope on permit application. See PDS technician to revise permit application scope.
- Provide fully dimensioned plot plan drawn to scale and indicating the following:
 - ☐ Lot dimensions with property lines and any easements identified
 - ☐ Size and use of all structures on the lot
 - ☐ Dimensions from structures to property lines (measured at right angles to structures)
 - ☐ Dimensions between structures (measured at right angles to structures)
- Plans are incomplete. Plan check will proceed with submittal of complete plans. Use this list as a guide in preparing plans.

6. The plans must be prepared using accepted drafting procedures and practice. You must retain the services of a California-licensed engineer or architect to help you prepare your plans and respond to the corrections on this list.
7. Provide two sets of calculations – addressing all applicable CBC 1605 load combinations – prepared, stamped, and signed by California-licensed civil engineer, structural engineer, or architect for:
 - ☐ Vertical load supporting system
 - ☐ Lateral load (wind/seismic) resisting system
 - ☐ Retaining walls
 - ☐ Glass guardrail systems
 - ☐ Other _____
8. All sheets of the plans must bear the stamp and wet signature of a California-licensed civil engineer, structural engineer, or architect.
9. Special inspection required for the following (CBC 1705):
 - ☐ Concrete anchors
 - ☐ Wood shear walls, diaphragms, and/or other seismic/wind-resisting elements per CBC 1705.10.1 and CBC 1705.11.2
 - ☐ High-strength concrete
 - ☐ Masonry
 - ☐ High-strength bolts
 - ☐ Field welding
 - ☐ Moment frames
 - ☐ Other _____
10. Complete PDS #006 special inspection summary (or equivalent) – listing elements required per item B.9 – and make a permanent part of full-size plan sheet. **Specify certified special inspector and phone number** for each element indicated on summary as requiring special inspection.
11. Provide **large, clear** note on the **plot plan**: “Special inspection required. See special inspection summary on sheet _____.”
12. Clearly distinguish on plans between proposed (new), as-built (non-permitted), and existing (permitted) construction.
13. Provide certification report(s) for all non-permitted and as-built construction per the following:

Exception: In lieu of certification report(s), the applicant may propose a **detailed** certification protocol – **subject to the plan reviewer’s approval and specified in the building plans** – indicating how as-built construction will be examined, certification documentation will be submitted to PDS, and noncompliant construction will be remedied.

 - ☐ Report addressing structural/life-safety elements produced, signed, and stamped by California-licensed Civil Engineer, Structural Engineer, or Architect
 - ☐ Report addressing electrical elements produced, signed, and stamped by California-licensed Electrical Engineer or Electrical Contractor

Exception: A California-licensed Civil Engineer, Structural Engineer, or Architect may prepare, stamp, and sign a certification report for as-built electrical elements provided those elements have been evaluated by a California-licensed Electrical Engineer or Electrical Contractor, whose name and license number is specified in the certification report
 - ☐ Report addressing plumbing elements produced, signed, and stamped by California-licensed Plumbing Contractor

Exception: A California-licensed Civil Engineer, Structural Engineer, or Architect may prepare, stamp, and sign a certification report for as-built plumbing elements provided those elements have been evaluated by a California-licensed Plumbing Contractor, whose name and license number is specified in the certification report
 - ☐ Report addressing mechanical elements produced, signed, and stamped by California-licensed Mechanical Engineer or Warm-Air Heating, Ventilating and Air-Conditioning Contractor

Exception: A California-licensed Civil Engineer, Structural Engineer, or Architect may prepare, stamp, and sign a certification report for as-built mechanical elements provided those elements have been evaluated by a California-licensed Mechanical Engineer or Warm-Air Heating, Ventilating and Air-Conditioning Contractor, whose name and license number is specified in the certification report
 - ☐ Reports indicate certifying parties have visited job site and list date(s) of job-site visit(s)
 - ☐ Reports include statement confirming the as-built construction complies with the code(s) applicable to the project and matches the construction detailed on the submitted building plans
 - ☐ Reports specify measures/test performed for certification with hidden construction verified by testing and/or destructive examination
 - ☐ Reports include test results, photos, and other evidence supporting certification
14. Specify on plans floor areas for each proposed or existing building.
15. Provide complete dimensions on floor plans.
16. Name, label, and specify on floor plans the use of each room or space.
17. Specify on plans the CBC occupancy classification for each room or space.
18. Specify on plans the CBC occupancy classification and use of any existing rooms or spaces adjoining proposed construction.

19. Specify on plans the CBC type of construction for each building.
20. Provide itemized material inventory including the following to assess potential hazardous occupancy classification (CBC 307):
 - ☐ Material name
 - ☐ Material category per CBC Table 307.1(1) and/or CBC Table 307.1(2)
 - ☐ Maximum proposed quantity (in pounds, gallons, or cubic feet as applicable)
 - ☐ Maximum allowable quantity per CBC Table 307.1(1) and/or CBC Table 307.1(2) with any increases specified
21. Where licensed 24-hour care facility proposed, provide the following to verify CBC occupancy classification:
 - ☐ Data table on plans specifying number of ambulatory, nonambulatory, bedridden, and elderly clients
 - ☐ At each bedroom location on floor plans, note indicating number of clients and client status – ambulatory, nonambulatory, bedridden, or elderly – proposed for housing in that bedroom
 - ☐ Copy of state license indicating approved number of clients of each client status
22. Provide a wall legend identifying new walls, existing walls to remain, and existing walls to be removed.
23. Foundation and framing plans shall be the same orientation as the floor plan.
24. Provide legend/definitions for all symbols, shaded areas, etc., used on plans.
25. Remove all “build per code” and “not for construction” notes from plans.
26. Provide a sheet index coordinated with plans.

C. SITE REQUIREMENTS

1. Post site identification cards and call for site inspection. Once the site inspection has been completed, call (858) 565-5920 to confirm the results. Additional correction items may apply based on the results.
2. Project may be located in a watercourse or flood area. Department of Public Works (DPW) approval is required.
3. Project located in an Alquist-Priolo Earthquake Fault Zone. Provide a geotechnical report prepared, stamped, and signed by a California-licensed civil engineer demonstrating the proposed building(s) will not be constructed across the trace of an active fault.
4. Rough grading approval from PDS Land Development and DPW Private Development Construction Inspection is required.
5. Soils report required (2 copies). (CBC 1803)
6. Compaction report required (2 copies). (CBC 1804)
7. Compaction reports more than 5 years old shall include an update letter by a California-licensed civil engineer.
8. *Note on the plans:* “The inspector will recheck for expansive soils and/or grading requirements at the first foundation inspection.”
9. Provide completed and signed Stormwater Intake Form (pages 1-2 of form LUEG:SWa) to determine stormwater management plan requirements.
10. Project qualifies as a Priority Development Project (PDP) per Table A of form LUEG:SWa and requires a Major Stormwater Management Plan (SWMP) approved by PDS Land Development and DPW Watershed. **Provide a copy of this approved Major SWMP** to verify applicable stormwater measures are reflected on the building permit sets.
11. Project requires a Minor Stormwater Management Plan. Provide the following on pages 3-8 of form LUEG:SWb:
 - ☐ Project information and applicant’s signature
 - ☐ Impervious area calculations (page 3 – use page 2 of PDS #272 as a guide)
 - ☐ Erosion control BMPs (page 5, table I, sections A, B, and/or C)
 - ☐ Sediment control BMPs (page 5, table I, section D)
 - ☐ Site management BMPs (page 5, table I, sections E and F)
 - ☐ Low impact development BMPs (page 6, table II)
 - ☐ Post-construction/permanent BMPs (page 7, table III)
12. Indicate on plot plan the location and square footage of land-disturbance activity. Coordinate with total entered on page 3 of form LUEG:SWb.
13. **When total area of land disturbance is 1 acre or more**, indicate on page 3 of form LUEG:SWb the Waste Discharge Identification Number (WDID) obtained from the State Water Resources Control Board (SWRCB). To obtain the WDID, state regulations require filing a Notice of Intent (NOI) and fee with the SWRCB. Contact the SWRCB for Stormwater Pollution Prevention Plan (SWPPP) requirements.

14. Provide BMP plan per the following (we recommend the PDS plot plan AutoCAD template with BMP legend available for download at <http://www.sccounty.ca.gov/pds/bldgforms/index.html>):
- ☐ Indicating general direction of site drainage
 - ☐ Identifying location of proposed erosion control BMPs per Minor/Major SWMP
 - ☐ Identifying location of proposed sediment control BMPs per Minor/Major SWMP
 - ☐ Identifying location of proposed site management BMPs per Minor/Major SWMP
 - ☐ Identifying location of proposed low impact development and permanent BMPs per Minor/Major SWMP
 - ☐ Including table or legend defining each BMP symbol (see PDS #272 sample plan)
15. County records indicate a permanent Treatment Control Best Management Practice (TCBMP) is located on the site. For more information on the installed TCBMP(s), call DPW Watershed at (858) 495-5298. **Specify on BMP plan** the location of the following installed TCBMP(s):
- ☐ Biofilter
 - ☐ Detention basin
 - ☐ Hydrodynamic separator system
 - ☐ Infiltration device
 - ☐ Media filter
 - ☐ Trash rack and drain insert
 - ☐ Wet pond and constructed wetland
 - ☐ Other

D. ALLOWABLE AREA AND HEIGHT

1. Building exceeds maximum area per story allowed per CBC Table 503 and/or maximum overall allowable area.
2. Specify on plans any buildings on same lot considered as portions of a single building. (CBC 705.3)
3. Provide on plans an area analysis and specify/calculate all allowable area increases/modifications. (CBC 506, CBC 507)
4. Indicate on plans location of any fire walls (area separation walls). _____-hour-rated fire walls required per CBC Table 706.4.
5. Detail fire wall assemblies. Specify CBC Table 721.1(2) assembly number or cite reference for alternate approved assembly.
6. Fire walls shall be of approved non-combustible materials – **except type V construction** -- and have sufficient structural stability to allow collapse of construction on either side without collapse of wall for duration of its fire rating. (CBC 706.2, CBC 706.3)
7. Fire walls do not meet CBC 706 provisions for:
 - ☐ Horizontal continuity
 - ☐ Vertical continuity
 - ☐ Opening location/size
8. Dimension grade plane and building height on all building sections and elevations.
9. Building exceeds the following CBC Table 503 limits:
 - ☐ Allowable height above grade plane
 - ☐ Allowable number of stories allowed
10. Specify on plans any proposed height and/or story increases. (CBC 504.2, CBC 504.3)

E. TYPE OF CONSTRUCTION

1. The following structural elements do not comply with proposed type ____ construction per CBC Table 601:
 - ☐ Structural frame
 - ☐ Exterior bearing walls
 - ☐ Interior bearing walls
 - ☐ Floor construction
 - ☐ Roof construction
2. Building elements in type I and type II construction shall be noncombustible.
Exception: Combustible materials allowed per CBC 603

F. EXTERIOR WALLS

1. Dimension on the plot plan the location of any assumed imaginary lines between buildings on the same lot to determine fire separation distance(s). (CBC 705.3)
Exception: Buildings on the same lot considered as portions of one building per item D.2
2. All exterior walls within _____ feet of property line or assumed imaginary line must be minimum _____ hour-rated construction. (CBC 705.5, CBC Table 602)

3. Detail fire-rated exterior wall assemblies. Specify CBC Table 721.1(2) assembly number or cite reference for alternate approved assembly.
4. The following proposed openings in exterior walls are not allowed within _____ feet of property line (CBC Table 705.8):
 - ☐ Unprotected openings
 - ☐ Protected openings
5. Exterior wall openings within _____ feet of property line exceed maximum allowable area per CBC Table 705.8 and CBC Equation 7-2.
6. Doors considered as protected openings in _____-hour-rated exterior walls shall be _____-hour-rated and self- or automatic-closing. (CBC Table 716.5)
7. Windows considered as protected openings in _____-hour-rated exterior walls shall be _____-hour-rated. (CBC Table 716.6)
8. Provide 3/4-hour-rated protection for openings less than 15 feet vertically above the roof of an adjoining/adjacent building on the same lot within 15 feet of imaginary property line between the two buildings. (CBC 705.8.6)
9. Provide parapets at exterior walls within _____ of property line per CBC 705.11.
10. Projections (i.e., cornices, eave overhangs, exterior balconies, architectural appendages extending beyond an exterior wall) shall comply with the following clearances based on the wall's fire separation distance per CBC Table 705.2:

Exception: Projections between buildings on the same lot considered as portions of one building per item D.2

 - ☐ Fire separation distance of 0 feet to less than 2 feet: Projections not allowed
 - ☐ Fire separation distance of 2 feet to less than 5 feet: Minimum 24-inch horizontal clearance between projection and property line or assumed imaginary line per item F.1
 - ☐ Fire separation distance of 5 feet or greater: Minimum 40-inch horizontal clearance between projection and property line or assumed imaginary line per item F.1
11. Combustible projections located where openings not permitted or where protected openings required shall be of 1-hour-rated construction, heavy-timber construction, fire-retardant-treated wood, or as specified by CBC 1406.3. (CBC 705.2.3)

G. FIRE AND SMOKE SEPARATION

1. Specify on plans any mixed occupancy areas of the building classified as nonseparated occupancies and demonstrate compliance with the following with entire nonseparated area considered as most restrictive occupancy proposed (CBC 508.3):

Exception: Nonseparated occupancy provisions do not negate fire separation required per item G.6

 - ☐ Allowable area per items D.1 and D.3
 - ☐ Allowable height per item D.9
 - ☐ Fire protection per section H
2. _____-hour-rated fire barriers (occupancy separations) required between _____ and _____ occupancies. (CBC Table 508.4)
3. Provide one of the following assemblies per CBC Table 509 at incidental use area labeled _____:
 - ☐ Separation from adjacent spaces with _____-hour-rated fire barrier
 - ☐ Sprinklers and separation from adjacent spaces with smoke-resistant walls and openings
4. Detail vertical and horizontal fire barrier assemblies and show adequate continuity through concealed spaces. Specify CBC Table 721.1(2) and/or CBC Table 721.1(3) assembly numbers on plans or cite reference for alternate approved assembly.

Exception: Voids at the intersection of a fire barrier and a non-rated roof assembly may be filled with an approved material resisting passage of fire and hot gases
5. Provide _____-hour-rated self- or automatic closing doors (CBC 716.5.9, CBC Table 716.5) and _____-hour-rated windows (CBC Table 716.6) in _____-hour-rated fire barriers.
6. Dwelling/sleeping units shall be separated from each other and from other occupancies per the following (CBC 420, CBC 708, CBC 711.3, CBC 714.3, CBC 716.5.4, CBC 716.5.9.3, CBC 1207):
 - ☐ Walls (provide details specifying CBC Table 721.1(2) assembly number or alternate listed assembly):
 - o 1-hour rated fire partition extending from foundation/floor below to either roof sheathing, fire-rated floor/ceiling assembly, or fire-rated roof/ceiling assembly above

Exception: 30-minute fire rating acceptable if sprinklered
 - o In combustible construction where fire partition is not continuous to sheathing/deck/slab above, the space between the ceiling and sheathing/deck/slab above shall be fireblocked or draftstopped at the partition line

Exception: Fireblocking or draftstopping not required at partition line in buildings equipped with NFPA 13 or NFPA 13R automatic fire sprinkler system with sprinklers installed in all combustible floor/ceiling and roof/ceiling spaces

Exception: Attic fireblocking or draftstopping not required at partition line in R-2 occupancy buildings not exceeding four stories above grade plane, provided the attic space subdivided by draftstopping into areas not exceeding 3000 square feet or above every two dwelling units, whichever is smaller
 - o Airborne sound insulation with minimum 50 STC rating (provide details specifying Gypsum Association assembly)

number or alternate listed assembly)

Exception: 45 STC acceptable if field-tested

- ☐ Floors/ceilings (provide details specifying CBC Table 721.1(3) assembly number or alternate listed assembly):

- o 1-hour fire rating with supporting construction of equal or greater fire rating

Exception: 30-minute fire rating acceptable if building equipped with NFPA 13 automatic sprinkler system

Exception: Rated supporting construction not required in type IIB, IIIB, or VB construction

- o Airborne sound insulation with minimum 50 STC rating and impact sound insulation with minimum 50 IIC rating (provide details specifying Gypsum Association assembly number or alternate listed assembly)

Exception: 45 STC or 45 IIC acceptable if field-tested

- ☐ Doors:

- o 3/4-hour-rated self- or automatic-closing doors with activation by smoke detection or power loss

Exception: 20-minute fire rating acceptable if 1/2-hour wall assembly allowed (sprinklered)

- ☐ Fire-rated penetrations (specify listing number and manufacturer of fire-stopping material) per CBC 714

- 7. Licensed 24-hour care facilities – R-2.1, R-3.1, and R-4 occupancies – shall comply with the following per CBC 425:

- ☐ 1-hour-rated construction required throughout for the following

- o R-2.1 occupancies
 - o R-3.1 occupancies where nonambulatory clients housed above the first story **and** building has more than two stories **or** more than 3000 square feet above the first story
 - o R-4 occupancies where nonambulatory clients housed above the first story **and** building has more than 3000 square feet above the first story **or** houses more than 16 clients above the first story
 - o R-4 occupancies housing nonambulatory elderly clients

- ☐ In R-3.1 occupancies, bedridden clients shall not be housed above or below the first story

- ☐ Smoke barriers required in the following:

- o R-2.1 occupancies housing bedridden clients or with individual floor areas over 6000 square feet
 - o R-4 occupancies with individual floor areas over 6000 square feet

- ☐ Any required smoke barriers shall divide floor as equally as possible with maximum 22,500 square feet and maximum 200 feet travel distance in any smoke compartment

- 8. Construction supporting fire barriers and fire partitions shall have an equivalent fire rating. (CBC 707.5.1, CBC 708.4)

Exception: Corridor walls in type IIB, IIIB, or VB construction

- 9. Openings in the following fire assemblies exceed allowable limits:

- ☐ Fire barriers per CBC 707.6 and CBC 716.6.7

- ☐ Fire partitions per CBC 716.6.7

- 10. Provide shaft enclosure per CBC 713 at opening through rated floor/ceiling or roof/ceiling assembly. Detail 1-hour-rated assembly – connecting fewer than four stories – and specify 1-hour-rated self- or automatic-closing doors with activation by smoke detection or power loss. (CBC 713, CBC 716.5.9.3)

- 11. Separated elevator lobbies required per CBC 713.14.1. Detail 1-hour-rated assembly and specify 3/4-hour-rated self- or automatic-closing doors with activation by smoke detection or power loss. (CBC 713.14, CBC 716.5.9.3)

- 12. Provide hoistway venting of elevators and dumbwaiters penetrating more than three stories per CBC 3004.

- 13. Detail 1-hour-rated shaft enclosure assembly for refuse/laundry chutes and specify 1-hour-rated self- or automatic-closing doors with activation by smoke detection or power loss. (CBC 713.4, CBC 713.13.1, CBC 716.5.9.3)

- 14. Detail 1-hour-rated fire barrier enclosing refuse/laundry chute access and termination rooms and specify 3/4-hour-rated self- or automatic-closing doors with activation by smoke detection or power loss. (CBC 713.13.3, CBC 713.13.4, CBC 716.5.9.3)

H. FIRE PROTECTION SYSTEMS

- 1. Provide automatic sprinkler system per CBC 903.

- 2. Provide standpipe system per CBC 905.

- 3. Provide the following fire alarm system(s) per CBC 907:

- ☐ Manual
 - ☐ Automatic

- 4. Indicate smoke alarms/detectors – interconnected and hard-wired with battery back-up – in the following locations on floor plans or utility plans of residential occupancies (CBC 907.2.11):

Exception: Smoke detectors shall not be located within areas specified in CBC 907.2.11.5

- ☐ Within each sleeping room
 - ☐ Outside each separate sleeping area in immediate vicinity of bedrooms
 - ☐ In every room within R-1 occupancies on path of egress from sleeping room to door leading from sleeping unit
 - ☐ On each story within dwelling/sleeping unit

- 5. Indicate carbon monoxide alarms – interconnected and hard-wired with battery back-up – in the following locations on floor

plans or utility plans of dwelling/sleeping units with fuel-burning appliances or dwelling units with an attached garage (CBC 420.6):

- ☐ Outside each separate sleeping area in immediate vicinity of bedroom(s)
- ☐ On each story of dwelling unit, plus any basements
- ☐ On ceiling of each R-1 sleeping unit

6. Provide the following per CBC Table 910.3 and indicate locations on plans:

- ☐ Smoke/heat vents
- ☐ Draft curtains

I. FIRE-RATED CONSTRUCTION

1. Detail individual protection of fire-rated structural members per CBC 704.

2. Provide corner guards or noncombustible jacket not less than 5 feet above finished floor for fire-rated structural members subject to vehicular impact. (CBC 704.9)

Exception: Concrete columns in open or enclosed parking garages

3. Provide details for all through and membrane penetrations of fire-rated assemblies -- including penetrations by recessed fixtures, pipe penetrations, electrical boxes, sprinklers, and ducts -- demonstrating protection equivalent to fire rating of assembly penetrated. (CBC 714.3, CBC 714.4)

Exception: Ceiling membrane of 1- and 2-hour-rated horizontal assemblies may be interrupted with double wood top plate of a fire-rated wall assembly

Exception: Annular space of through penetrations of concrete or masonry fire-rated walls by steel, ferrous or copper pipes, tubes or conduits -- maximum 6-inch nominal diameter and maximum 144-square-inch opening in wall -- may be protected by concrete, grout, or mortar installed for the full thickness of the wall or the thickness required to maintain the fire rating provided the material prevents the passage of flame and hot gases per ASTM E 119 or UL 263

Exception: Membrane penetrations of maximum 2-hour-rated walls allowed for steel electrical boxes not exceeding 16 square inches provided the aggregate area of openings does not exceed 100 square inches in any 100 square feet of wall area and such boxes on opposite sides of the wall are separated by one of the following:

- ☐ Minimum 24-inch horizontal distance
- ☐ Horizontal distance not less than depth of wall cavity if filled with loose-fill, rock wool, or slag mineral wool insulation
- ☐ Solid fireblocking
- ☐ Listed putty pads protecting both boxes (specify listing number)
- ☐ Other listed materials and methods (specify listing numbers)

Exception: Membrane or through penetrations by listed electrical boxes meeting fire rating of assembly penetrated

Exception: Membrane penetrations by boxes other than electrical boxes, provided annular space between wall membrane and box protected by firestop system per item I.4

Exception: Through penetrations by steel, ferrous or copper conduits, pipes, tubes or vents or concrete or masonry items through a single fire-rated floor where the annular space is protected with materials that prevent the passage of flame and hot gases per ASTM E 119 or UL 263

Exception: Through penetrations in a single concrete floor by steel, ferrous or copper conduits, pipes, tubes or vents -- maximum 6-inch nominal diameter -- provided the concrete, mortar or grout is installed for the full thickness of the floor or the thickness required to maintain the fire rating (not limited to penetration of a single concrete floor, provided area of opening through each floor does not exceed 144 square inches)

Exception: Annular space created by sprinkler penetration, provided it is covered by a metal escutcheon plate

4. Specify listing report number for any proposed penetration firestop systems to verify the following (CBC 714.3.1.2, CBC 714.4.1.1.2):

- ☐ System tested in accordance with ASTM E814 or UL 1479
- ☐ For penetration of wall assemblies, firestop system F rating not less than required rating of the wall
- ☐ For penetration of horizontal assemblies, firestop system F rating/T rating not less than required rating of horizontal assembly (minimum 1-hour rating)

Exception: Floor penetrations contained and located within cavity of wall above or below floor do not require a T rating

Exception: Floor penetrations by floor drains, tub drains, or shower drains contained and located within the concealed space of a horizontal assembly do not require a T rating

5. Noncombustible penetrating items shall not connect to combustible materials beyond the fire-rated assembly. (CBC 714.3.3)

6. Provide ____-hour-rated fire damper for duct/air-transfer penetration of the following (CBC 717, CBC Table 717.3.2.1):

- ☐ Fire walls
- ☐ Fire barriers

Exception: Penetrations of fire barriers per CBC 717.5.2 exceptions

- ☐ Shaft enclosures

Exception: Penetrations of shaft enclosures per CBC 717.5.3 exceptions

- ☐ Fire partitions

Exception: Penetrations of fire partitions per CBC 717.5.4 exceptions

- ☐ Corridors

- ☐ Fire-rated floor/ceiling assemblies (through penetrations)

Exception: Penetrations protected by shaft enclosure

Exception: Duct permitted to penetrate three floors or fewer without fire damper at each floor, provided such duct meets exception provisions of CBC 717.6.1

7. Provide smoke damper with Class I or II leakage ratings for duct/air-transfer penetration of the following (CBC 717):
 - ☐ Fire barriers in high-rise buildings, A, E, H, I, L, and R occupancies
 - ☐ Shaft enclosures
 - Exception:** Penetrations of shaft enclosures per CBC 717.5.3 exceptions
 - ☐ Corridors
 - Exception:** Penetrations of corridors per CBC 717.5.4.1 exceptions
 - ☐ Smoke barriers
 - ☐ Smoke partitions
8. Provide complying shaft enclosure or listed ceiling radiation damper for duct/air-transfer membrane penetration of fire-rated floor/ceiling assemblies. (CBC 717.6.2)
9. Detail fireblocking at the following locations (CBC 718.2):
 - ☐ Vertically at ceiling and floor levels and horizontally at intervals not exceeding 10 feet in concealed spaces of stud walls and partitions, furred spaces, and parallel rows of studs or staggered studs
 - ☐ Interconnections between concealed vertical stud wall or partition spaces and concealed horizontal spaces created by floor joists/truss
 - ☐ Between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings, and cove ceilings
 - ☐ Concealed spaces between stair stringers at the top and bottom of the run
 - ☐ Openings around vents, pipes, ducts, chimneys and fireplaces at ceiling and floor levels (using material approved to resist free passage of flame and products of combustion – specify listing number)
 - ☐ Between attic spaces and chimney chases for factory-built chimneys and fireplaces
 - ☐ Maximum intervals of 20 feet – with no open space exceeding 100 square feet – in concealed spaces of exterior wall finish and other exterior architectural elements
 - ☐ In the spaces between the floor slab and underside of wood flooring where wood sleepers used such that no open spaces under the flooring exceed 100 square feet or communicate between rooms
10. Detail draftstopping subdividing floor/ceiling assemblies per the following (CBC 718.3):

Exception: Draftstopping not required in sprinklered buildings other than high-rises, A, E, H, I, and R-2.1 occupancies

Exception: In sprinklered high-rise buildings, A, E, H, I, L, and R-2.1 occupancies, the area between draftstops may be maximum 3000 square feet with maximum 100-foot dimensions between draftstops

 - ☐ Above and in line with dwelling/sleeping unit separation in unsprinklered R-1 occupancies and unsprinklered R-2 occupancies with three or more dwelling units
 - ☐ Other unsprinklered occupancies such that horizontal floor areas do not exceed 1000 square feet
11. Detail draftstops subdividing attics, mansards, overhangs, and other concealed roof spaces per the following (CBC 718.4):

Exception: Draftstopping not required in sprinklered buildings other than high-rises, A, E, H, I, and R-2.1 occupancies

Exception: In sprinklered high-rise buildings, A, E, H, I, L, and R-2.1 occupancies, the area between draftstops may be maximum 9000 square feet with maximum 100-foot dimensions between draftstops

 - ☐ Above and in line with dwelling/sleeping unit separation in unsprinklered R-1 occupancies and unsprinklered R-2 occupancies with three or more dwelling units
 - ☐ Other unsprinklered occupancies such that horizontal concealed roof areas do not exceed 3000 square feet
12. Detail any joints in fire-rated walls, floors, ceilings, and roofs per CBC 715.
13. Specify interior wall and ceiling finish for all spaces on plans. Space labeled _____ required to have class _____ finish per CBC Table 803.9.

J. EXITING

1. Provide egress plan addressing all occupiable spaces and indicating the following (CBC 1004):
 - ☐ Occupant load at individual spaces with CBC Table 1004.1.1 occupant load factor(s) and applicable gross/net floor area specified at each space
 - Exception:** Occupant load for fixed seating areas shall be calculated per CBC 1004.4
 - ☐ Intended egress routes with cumulative occupant load specified at exit doors, corridors, stairways, and intervening rooms
 - ☐ Overall occupant load of building
2. Assembly space labeled _____ must have occupant load posted in conspicuous place near main exit or exit-access doorway from space. (CBC 1004.3)
3. Building requires _____ exits from _____ story. (CBC Table 1021.1, CBC Table 1021.2(1), CBC Table 1021.2(2))
4. Space labeled _____ requires _____ exits. (CBC Table 1015.1)
5. Egress from licensed 24-hour care facilities -- R-2.1, R-3.1, and R-4 occupancies -- also shall comply with CBC 425.8 provisions.

6. Provide complying exits from the following spaces (CBC 1015.3, CBC 1015.4, CBC 1015.5):
 - ☐ Boiler, incinerator, and furnace rooms more than 500 square feet with fuel-fired equipment exceeding 400K BTUs:
 - o Minimum two exits (one may be fixed ladder or alternating tread device)
 - ☐ Refrigeration machinery rooms more than 1000 square feet
 - o Minimum two exits (one may be fixed ladder or alternating tread device)
 - o All portions of machinery room within 150 feet of an exit
 - ☐ Refrigerated rooms or spaces more than 1000 square feet
 - o Minimum two exits
 - o All portions of unsprinklered refrigerated room within 150 feet of an exit
 - o Egress allowed through adjoining refrigerated rooms
7. Dimension between exits or exit-access doors from _____ shall be least one-half the maximum overall diagonal of area served (measured in straight line between exits or exit-access doors). (CBC 1015.2.1)

Exception: Separation may be one-third the maximum overall diagonal in sprinklered buildings

Exception: Where interior exit stairways are interconnected by a 1-hour fire-rated corridor, the required exit separation shall be measured along the shortest line of travel within the corridor
8. Exit separation required by item J.7 must be maintained to exit discharge. (CBC 1015.2)
9. Exit travel distance from space labeled _____ exceeds allowable values per CBC Table 1016.2.
10. Egress from space labeled _____ may not pass through space labeled _____. (CBC 1014.2)
11. Egress from space labeled _____ must offer **two** separate and distinct paths to **two** exits before occupants travel _____ feet. (CBC Table 1014.3)
12. Dimension minimum 44-inch corridor width or as required for occupant load served. (CBC 1005.1, CBC 1018.2)

Exception: Minimum 24-inch corridor width acceptable for access to mechanical, plumbing, or electrical systems or equipment

Exception: Minimum 36-inch corridor width acceptable when serving occupant load less than 50

Exception: Minimum 36-inch corridor width acceptable within a dwelling unit

Exception: Minimum 72-inch corridor width required in E occupancies when serving occupant load of 100 or more
13. Where more than one exit required, corridor dead ends may not exceed 20 feet. (CBC 1018.4)

Exception: Maximum 50 feet in sprinklered B, E, F, M, R-1, R-2, R-2.1, R-4, S, and U occupancies

Exception: Dead-end corridor length not limited where dead-end length is less than 2.5 times dead-end width
14. Fire-rated corridors required for the following (CBC Table 1018.1):
 - ☐ Unsprinklered A, B, F, M, S and U occupancies with corridor occupant load greater than 30
 - ☐ A occupancies requiring rated corridors per CBC 1028.3
 - ☐ E occupancies with corridor occupant load greater than 10
 - ☐ Sprinklered R-1, R-2, R-3, R-3.1, and R-4 occupancies with corridor occupant load greater than 10
 - ☐ Sprinklered I and R-2.1 occupancies with corridor occupant load greater than 6
 - ☐ Sprinklered H-4, H-5, and L occupancies with corridor occupant load more than 30
 - ☐ Sprinklered H-1, H-2, and H-3 occupancies
15. If rated corridors required by item J.14, provide the following (CBC Table 1018.1, CBC 1018.6, CBC 708, CBC 716):
 - ☐ 1-hour-rated corridors walls and/or floors/ceilings per section G (detail and specify CBC Table 721.1(2) and/or CBC Table 721.1(3) assembly numbers on plans or cite reference for alternate approved assembly)
 - ☐ 1/3-hour-rated self- or automatic-closing doors activated by smoke detection or power loss
 - ☐ 3/4-hour-rated windows (with cumulative area not exceeding 25% of common wall area with any room)
 - ☐ Continuity from point of entry to exit with no intervening rooms
16. Dimension aisle and aisle accessway width per CBC 1017 from spaces containing seats, tables, furnishings, or displays.
17. Specify width, height, and operation type of all doors. (CBC 1008)
18. All egress doors – including those provided in excess of number required – must meet the following (CBC 1005.1, CBC 1008.1, CBC 11B-404.2.7):
 - ☐ Minimum 32-inch clear width (at least one door leaf providing this width at double doors)
 - ☐ Maximum 48-inch door leaf on swinging doors
 - ☐ Minimum 6-foot-8-inch clear height
 - ☐ Hardware minimum 34 inches and maximum 44 inches above finished floor
19. Exit door _____ from space labeled _____ does not provide adequate clear width to serve occupant load shown on egress plan. (CBC 1005.1)
20. Loss of exit door _____ from space labeled _____ reduces available capacity to less than 50% required capacity. (CBC 1005.5)

21. *Note on plans:* "Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort." (CBC 1008.1.9)
22. Egress doors shall be side-hinged swinging or pivoted. (CBC 1008.1.2)
Exception: Private garages, office areas, factory areas, and storages areas with an occupant load of 10 or fewer
Exception: Doors within or serving a single dwelling unit in R-2 and R-3 occupancies
Exception: Doors serving bathroom within R-1 sleeping unit
Exception: In other than H occupancies, revolving doors per CBC 1008.1.4.1
Exception: In other than H occupancies, horizontal sliding doors per CBC 1008.1.4.3
Exception: In other than H occupancies, manually operated horizontal-sliding doors acceptable in areas with an occupant load of 10 or less
Exception: Power-operated doors per CBC 1008.1.4.2
23. Exit doors – including those provided in excess of number required – shall swing in direction of egress when serving an occupant load of 50 or more or an H occupancy. (CBC 1008.1.2)
24. Door _____ from space labeled _____ reduces required dimension(s) as follows (CBC 1008.1.6):
☐ Door in fully open position reduces required width of egress component by more than 7 inches
☐ Door in any position reduces required width of egress component by more than 50%
25. Door at space labeled _____ does not meet egress provisions for the following special doors (CBC 1008.1.4):
☐ Revolving door
☐ Power-operated door
☐ Horizontal-sliding door
☐ Access-controlled door
26. Specify on door schedule panic hardware or fire exit hardware at each door – including those provided in excess of number required – serving the following (CBC 1008.1.10):
☐ Rooms/spaces with an occupant load of 50 or more in the following:
 o A occupancies
 Exception: Main exit of A occupancy meeting provisions of item J.27
 o Assembly areas not classified as A occupancies
 o E, I-2, or I-2.1 occupancies
☐ H occupancies
27. Specify on door schedule any locking or latching hardware. Locks or latches only allowed for the following (CBC 1008.1.9.3):
☐ Main exterior doors(s) of the following occupancies/uses where sign posted on egress side adjacent to or on door(s) stating "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED":
 o B, F, M, and S occupancies
 o Places of religious worship
 o A occupancies with occupant load of 300 or less
☐ Doors from individual dwelling/sleeping units in R occupancies with occupant load of 10 or less
☐ Places of detention or restraint
28. Provide at least one emergency egress door or window complying with the following in R-2 and R-3 occupancies at each basement and sleeping room below the fourth story above grade (CBC 1029):
☐ Minimum 5.7-square-foot net clear opening area
 Exception: Minimum 5.0-square-foot net clear opening area acceptable for grade-level room
☐ Minimum 24-inch net clear opening height
☐ Minimum 20-inch net clear opening width
☐ Bottom of clear opening maximum 44 inches above floor
☐ Opening directly to public way or yard/court opening to public way
☐ Where escape/rescue opening sill height is below grade level, window well provided per CBC 1029.5
29. **Interior exit stairway/ramp** (i.e., protected egress element considered as exit) shall comply with the following (CBC Table 716.5, CBC 716.5.5.1, CBC 1009.2, CBC 1022, CBC 1027.1):
Exception: Enclosures not required in occupancies other than H, I, and R-2.1 for stairways serving an occupant load of less than 10 and not open to more than one level above or below level of exit discharge
Exception: Enclosures not required within dwelling or sleeping units
☐ Used exclusively for egress
☐ Leading directly to building exterior
 Exception: Maximum 50 percent of required interior exit stairways/ramps eligible for CBC 1027.1 exceptions
 Exception: Interior exit stairway/ramp extended to building exterior by exit passageway per CBC 1023
☐ Separated from building with 1-hour-rated fire barriers (detail assemblies and specify CBC Table 721.1(2) and/or CBC Table 721.1(3) assembly numbers on plans or cite reference for alternate approved assembly)
☐ Protection of any exterior walls with proximity to other parts of building per CBC 1022.7
☐ Allowable openings limited to those providing access into or egress from interior exit stairway/ramp
 Exception: Unprotected exterior openings
☐ Openings in fire-rated assembly 1-hour-rated and self- or automatic-closing

- ☐ Maximum 100 square inches of glazing in fire-rated door assemblies
Exception: Doors tested per CBC 716.5.5.1 provisions
 - ☐ Elevators may not open into interior exit stairways/ramps
 - ☐ Penetrations into and openings through interior exit stairways/ramps are prohibited
Exception: Required exit doors
Exception: Equipment and ductwork necessary for independent ventilation or pressurization, sprinkler piping, standpipes, electrical raceway for fire department communication systems, and electrical raceway serving interior exit stairway or ramp and terminating at steel box maximum 16 square inches
Exception: Membrane penetrations per CBC 714.3.2 on the outside of the interior exit stairway/ramp
 - ☐ Equipment and ductwork serving interior exit stairways/ramps shall comply with one of the following:
 - Located exterior to the building and directly connected to interior exit stairway/ramp by ductwork within complying shaft enclosure
 - Where located within interior exit stairway or ramp, intake air shall be taken directly from outdoors and exhaust air discharged directly to outdoors, or such air shall be conveyed through ducts within complying shaft enclosure
 - Where located within building, separated from remainder of building, including other mechanical equipment, by complying shaft enclosure
30. Floor openings between stories created by **exit access stairway/ramp** (i.e., an interior stairway/ramp that is not a required interior exit stairway/ramp per item J.29) shall be enclosed **unless** meeting **one of the following**:
- ☐ In other than I-2, I-2.1, I-3, and R-2.1 occupancies, serves, or atmospherically communicates between, only two stories
 - ☐ In buildings with only B or M occupancies per **all of the following**:
 - Building is sprinklered
 - Area or floor opening between stories does not exceed twice the horizontal projected area of the exit access stairway/ramp
 - Opening protected by draft curtain and closely spaced sprinklers per NFPA 13
 - ☐ In other than B, I-2, I-2.1, I-3, and M occupancies per **all of the following**:
 - Building is sprinklered
 - Floor opening does not connect more than four stories
 - Area or floor opening between stories does not exceed twice the horizontal projected area of the exit access stairway/ramp
 - Opening protected by draft curtain and closely spaced sprinklers per NFPA 13
 - ☐ Serves and contained within single R-1, R-2, or R-3 occupancy dwelling or sleeping unit
 - ☐ Within an atrium per CBC 404
 - ☐ In open parking garage and serving only the garage
 - ☐ Serving outdoor facilities where all portions of means of egress essentially are open to the outside
 - ☐ Serving stages, platforms, and technical production areas per CBC 410.6.2 and CBC 410.6.3
 - ☐ Between balcony, gallery, or press box and main assembly floor in occupancies such as theaters, places of religious worship, auditoriums, and sports facilities
 - ☐ In I-3 occupancies and constructed per CBC 408.5
31. Exterior egress elements shall comply with the following (CBC 1019, CBC 1026.6):
- ☐ Exterior balconies:
 - Comply with corridor requirements for width, headroom, and dead ends
 - Separated from interior of building by walls and opening protection required for corridors
Exception: Separation not required where balcony served by at least two stairs and dead-end travel condition does not require travel past unprotected opening to reach stair
 - Long side minimum 50% open, with open area above guards distributed to minimize accumulation of smoke/gas
 - Located minimum 10 feet from adjacent lot lines and other buildings on same lot without exterior wall protection
 - ☐ Exterior stairways and ramps:
 - Open on at least one side, with minimum 35 square feet of aggregate open area adjacent to each floor level and intermediate landing and located minimum 42 inches above floor/landing level
 - Adjoining open areas shall be yards, courts, or public ways
 - Located minimum 10 feet from adjacent lot lines and other buildings on same lot without exterior wall protection
 - Separation from interior of building per CBC 1026.6
32. Provide stairway dimensions complying with the following on floor plans and building sections (CBC 1009):
- ☐ Minimum 44-inch clear width or as required for occupant load served
Exception: Minimum 36-inch clear width acceptable for stairways serving occupant load of less than 50
 - ☐ Minimum 6-foot-8-inch headroom
 - ☐ Landing width equivalent to stairway width
 - ☐ Landing depth equivalent to stairway width (up to 48 inches)
 - ☐ Maximum 12-foot vertical rise between floor levels or landings
33. Door _____ from space labeled _____ reduces required dimension(s) as follows (CBC 1009.8):
- ☐ Door in fully open position projects more than 7 inches into stairway landing
 - ☐ Door in any position reduces required landing width by more than 50%
34. Dimension stairway risers and treads complying with the following (CBC 1009.7.2):
- ☐ Minimum 4-inch and maximum 7-inch riser height
 - ☐ Minimum 11-inch tread depth

35. Winding stairways allowed as means of egress only for the following (CBC 1009.7.3, CBC 1009.11, CBC 1009.12):
- ☐ Curved stairways per the following:
 - o Minimum 11-inch tread depth at 12 inches from inside edge and minimum 10-inch tread at any point within stairway clear width
 - o Smallest radius at twice required stairway width
 - ☐ Spiral stairways per the following:
 - o Serving dwelling units or space not more than 250 square feet with maximum 5 occupants
 - o Minimum 26-inch clear width
 - o Minimum 6-foot-6-inch headroom
 - o Maximum 9-1/2-inch riser height
 - o Minimum 7-1/2-inch tread depth at 12 inches from inside edge
36. Detail stairway risers and treads complying with the following (CBC 1009.7.5):
- ☐ Solid risers
 - Exception:** Open risers acceptable if stairway does not serve as accessible means of egress and if openings between treads do no permit passage of 4-inch-diameter sphere
 - Exception:** Open risers acceptable in spiral stairways complying with item J.35
 - ☐ Risers vertical or sloped under tread above at maximum 30 degrees from vertical
 - ☐ Maximum 1-1/4-inch nosings beyond the tread below
 - ☐ Maximum 9/16-inch radius of curvature at nosings
 - ☐ Maximum 9/16-inch beveling of nosings
37. Dimension and detail stairway handrails complying with the following (CBC 1009.15, CBC 1012):
- ☐ Provided on each side of stairway
 - Exception:** Handrails acceptable on one side of spiral stairways
 - Exception:** Aisle stairs per CBC 1028.13
 - ☐ Intermediate handrails provided as needed such that all portions of required stairway width within 30 inches of handrail
 - ☐ Located at uniform height minimum 34 inches and maximum 38 inches vertically above tread nosings
 - ☐ Maximum 4-1/2-inch projection into required stairway width
 - ☐ Continuous for full length of stairway flight
 - ☐ Extending minimum 12 inches horizontally beyond top riser
 - ☐ Sloping for depth of one tread beyond bottom riser (plus horizontal extension if required per CBC 11A or CBC 11B)
 - Exception:** Aisle handrails need only comply with CBC 1028.13
 - ☐ Minimum 1-1/2-inch clearance between handrails and adjacent walls
 - ☐ Grip size and shape per CBC 1012.3
38. Provide coordinated details specifying the following stairway elements designed for CBC Table 1607.1 stair live loads:
- ☐ Stringer sizes
 - ☐ Landing joists and beams
 - ☐ Hangers
39. Walls and soffits within enclosed usable spaces beneath stairways shall be minimum 1-hour rated or required rating of stairway enclosure. (CBC 1009.9.3)
40. When usable space provided beneath grandstands and bleachers, such spaces shall be separated from seating above with 1-hour-rated fire barrier and horizontal assembly. (CBC 1028.1.1.1)
- Exception:** Tickets booths of less than 100 square feet
 - Exception:** Toilet rooms
41. Provide guard complying with the following at any open-sided walking surface – including mezzanines, balconies, decks, stairs, ramps, and landings – located more than 30 inches vertically above adjacent floor or grade within 36 inches horizontally of open-side edge (CBC 1013):
- ☐ Minimum 42-inches high above walking surface
 - Exception:** Minimum 34 inches for guard at open side of stairs in R-3 occupancies and within individual R-2 dwelling units
 - Exception:** Minimum 34 inches and maximum 38 inches for guard also serving as handrail on open side of stairs in R-3 occupancies and within individual R-2 dwelling units
 - Exception:** Assembly seating per CBC 1028.14
 - ☐ Openings in guard may not allow passage of 4-inch-diameter sphere
 - Exception:** From 36-inch to 42-inch guard height, openings may not allow passage of 4-3/8-diameter sphere
 - Exception:** Triangular openings formed by riser, tread, and bottom rail of guard may not allow passage of 6-inch-diameter sphere
 - Exception:** In areas not open to the public within I-3, F, H, or S occupancies, openings may not allow passage of 21-inch-diameter sphere
 - Exception:** Within individual dwelling and sleeping units in R-2 and R-3 occupancies, openings may not allow passage of 4-3/8-diameter sphere
 - Exception:** Assembly seating per CBC 1013.4, exception 5
42. Provide guard complying with the following where mechanical equipment or roof hatch opening located within 10 feet of a roof edge or open side of walking surface more than 30 inches above adjacent floor or grade (CBC 1013.6, CBC 1013.7):
- ☐ Minimum 42-inches high above walking surface

- ☐ Openings in guard may not allow passage of 21-inch-diameter sphere
43. Provide coordinated connection details specifying the following for guardrail systems including glass (CBC 1607.8.1, CBC 2407.1):
- ☐ Glass shall be tempered
 - ☐ Glass thickness (any structural glass designed with safety of factor of 4 considering CBC 1607.8.1 guardrail loads)
 - ☐ Member sizes designed for CBC 1607.8.1 guardrail loads
 - ☐ Means of connection (member-to-member and guardrail to supporting structure) for CBC 1607.8.1 guardrail loads
44. In R-2 and R-3 occupancy dwelling units with operable windows located more than 72 inches above adjacent finished grade or surface below, the lowest part of the clear window opening shall be minimum 36 inches above the finished floor. (CBC 1013.8)
Exception: Windows with openings not allowing passage of 4-inch-diameter sphere when in largest opened position
Exception: Windows provided with fall prevention devices or window opening limiting devices meeting ASTM F 2090
45. Indicate on electrical plans illumination along egress paths of minimum 1 foot-candle at walking surface. (CBC 1006.2)
Exception: May be reduced to minimum 0.2 foot-candle in auditoriums, theaters, concert halls, or similar occupancies provided illumination automatically restored upon activation of fire alarm system
46. Indicate on electrical plans emergency power for illumination along egress paths in the following areas (CBC 1006.3):
- ☐ Aisles and unenclosed egress stairways in rooms and spaces requiring two or more means of egress
 - ☐ Corridors, interior exit stairways and ramps, and exit passageways in building required to have two or more exits
 - ☐ Exterior egress components at other than their levels of exit discharge until exit discharge accomplished in building required to have to have two or more exits
 - ☐ Interior exit discharge elements per CBC 1027.1 in buildings required to have two or more exits
 - ☐ Exterior landings at exit discharge doorways in buildings required to have two or more exits
47. Indicate on egress plan location of the following signage and coordinate with electrical plans as applicable (CBC 1011):
- ☐ Illuminated exit signs at the following:
 - Exception:** Exit signs not required in rooms or spaces requiring only one exit
 - Exception:** Main exterior exit doors or gates obviously and clearly identifiable as exits
 - Exception:** U occupancies and within individual dwelling or sleeping units in R-1, R-2, R-3, or R-3.1 occupancies
 - o Where path of egress not immediately visible to occupants
 - o At intervening exit doors
 - o Within 100 feet of all points in corridors
 - ☐ Tactile signs at the following:
 - o At each grade-level exterior exit door
 - o At each exit door leading to grade-level exterior exit door via stair, ramp, exit enclosure, or horizontal exit
 - o At each exit door from interior room or area required to have illuminated exit sign
 - ☐ Floor-level exit signs per CBC 1011.7
 - ☐ Path marking per CBC 1011.8

K. SAFETY GLAZING

1. Specify tempered glass at the following locations requiring safety glazing (CBC 2406.4):
- ☐ Glazing in swinging, sliding, and bi-fold doors
 - Exception:** Glazed openings through which a 3-inch-diameter sphere is unable to pass
 - Exception:** Decorative glazing
 - Exception:** Glazing used as curved glazed panels in revolving doors
 - ☐ Glazing within 24-inch arc of door in closed position and within 60 inches of floor or walking surface
 - Exception:** Glazing with intervening wall or barrier between door and glazing
 - Exception:** Within R-2 and R-3 dwelling units, glazing in walls on latch side of and perpendicular to plane of door in closed position
 - Exception:** Where door accesses closet or storage area maximum 3 feet in depth
 - Exception:** Decorative glazing
 - ☐ Glazing adjacent to showers, bathtubs, hot tubs, swimming pools, and saunas and within 60 inches – vertically and horizontally -- of standing/walking surface
 - ☐ Glazing adjacent to stairways, ramps, and intermediate landings within 36 inches horizontally and 36 inches vertically of the travel surfaces
 - Exception:** Where horizontal rail installed on accessible side of glazing at minimum 34 inches and maximum 38 inches above walking surface
 - ☐ Glazing adjacent to bottom stair landings within 60 inches horizontally and 36 inches vertically of landing surface
 - Exception:** Glazing protected by complying guard and minimum 18 inches from guard
 - ☐ Glazing per the following within 36 inches horizontally of walking surfaces:
 - Exception:** Where horizontal rail installed on accessible side of glazing at minimum 34 inches and maximum 38 inches above walking surface
 - Exception:** Decorative glazing
 - o Exposed area of individual pane minimum 9 square feet
 - o Bottom edge of glazing within 18 inches of floor
 - o Top edge of glazing more than 36 inches above floor

L. PARTITION WALLS AND SUSPENDED CEILINGS

1. Detail the following partition wall connections:
 - ☐ Connection to roof/ceiling/floor above with any partitions attached to suspended ceilings laterally braced to the building structure
 - ☐ Connection to slab/floor below
2. Provide complete details indicating the following for suspended ceiling systems (ASCE 7 13.5.6.2.2):

Exception: Alternative connection detailing acceptable for listed suspended ceiling systems

 - ☐ Heavy duty T-bar grid system
 - ☐ Runner and cross-runner sizes and spacing
 - ☐ Vertical wires and compression struts connecting suspension runners and cross-runners to building structure
 - ☐ Perimeter support per all of the following:
 - o Minimum 2-inch closure angles
 - o Two adjacent ends of ceiling grid attached to closure angles
 - o At ends opposite those attached to closure angles, ends of ceiling grid resting upon and free to slide on closure angles
 - o At ends free to slide on closure angles, minimum 3/4-inch clearance between ends of ceiling grid and walls
 - ☐ For uninterrupted ceiling areas exceeding 1000 square feet, lateral bracing to building structure
 - ☐ For uninterrupted ceiling areas exceeding 2500 square feet, seismic separation joints
 - ☐ Connection of lighting fixtures, electrical conduits, and cable trays supported by building structure
 - ☐ Minimum 2-inch rings/sleeves/adapters for sprinkler heads and allowing minimum 1-inch movement in all horizontal directions

M. ROOF ASSEMBLIES

1. Specify roof material and underlayment.
2. Specify ICC, UL, or equivalent listing report number and manufacturer for roofing material (tile, metal, built-up, etc.).
3. *Note on roof plan or elevations:* "Roofing shall have a class A fire rating." (County Building Code 92.1.1505.1)
4. Specify roof pitch.
5. Specify on plans layer-by-layer assembly of any built-up roofing systems – include coordinated assembly number from manufacturer's listing report – to verify required fire rating achieved at roof pitch proposed.
6. Roof pitch is not adequate for roof type specified (CBC 1507). Provide minimum pitch of _____.
7. Specify 1/4:12 minimum roof pitch for drainage on roof plan or design to support accumulated water. (CBC 1611.1, CBC 1611.2)
8. Detail primary and secondary (overflow) roof drainage per the following with location of each roof drainage element indicated on roof plan (CBC 1503.4, CPC 1101.11):
 - ☐ Primary roof drainage per **one of the following:**
 - o Roof drains sized per CPC Table D 1.1 – provide calculation on roof plan – and located at low point of roof
 - o Scuppers sized per CBC Table D 1.1 – provide calculation on roof plan – and placed level with roof surface in adjacent walls or parapets
 - ☐ Secondary (overflow) roof drainage with same capacity as primary roof drainage per **one of the following:**
 - o Roof drains with maximum height to prevent roof ponding and minimum 2 inches above low point of roof
 - o Scuppers with minimum 4-inch opening dimension and inlet elevation preventing roof ponding
 - ☐ Primary and secondary (overflow) roof drainage with separate outlets
9. Indicate on plans approved waterproof decking material for balconies/decks over interior spaces (CBC 1503.1). Specify manufacturer and ICC, UL, or equivalent listing report number.
10. Indicate on roof plan location and size of attic vents per the following:
 - ☐ Minimum net vent area per the **greater of the following:**
 - o Minimum 1 s.f. of net vent area required for every 150 s.f. of attic area (**provide calculation on roof plan**) (County Building Code 92.1.1203.2)

Exception: Net vent area of 1/300 attic area acceptable if between 50% and 80% of vents are located minimum 3 feet above eave or cornice vents – as allowed per item N.7 – providing balance of required vents

Exception: Net vent area of 1/300 attic area acceptable in **climate zone 14** with vapor barrier on warm-in-winter side of attic insulation

Exception: Unvented attics complying with CRC R806.5
 - o Net vent area indicated on CF1R form for **multi-family projects with a whole-house fan** (CBEEES 150.1(c)12)
 - ☐ Vents positioned to provide cross ventilation to each attic area
11. Specify on roof plan the following for each skylight (CBC 2405):
 - ☐ Size and location

- ☐ Glazing material
- ☐ Manufacturer and ICC, UL, or equivalent listing report number
- ☐ Screening as required per CBC 2405.3 or listing report

N. WILDFIRE-RESISTIVE CONSTRUCTION REQUIREMENTS

1. Indicate on plan location and size of fuel modification zone per the following (County Fire Code 96.1.4907.2):
 - ☐ Dimension minimum 100-foot fuel modification zone from perimeter of each structure
 - ☐ Fuel modification zone may not cross property lines or encroach into open space easements
 - ☐ If lot dimensions do not allow full 100-foot fuel modification zone, *note on plot plan*: "Entire lot is fuel modified."
2. In roof coverings where the profile creates space between the roof covering and combustible roof decking, specify **one of the following** means of protecting spaces at eave ends (County Building Code 92.1.705A.2):
 - ☐ Fire-stopping with approved materials (e.g., non-combustible birdstops for curved tile)
 - ☐ One layer of No. 72 ASTM cap sheet installed over combustible decking
 - ☐ Otherwise constructed to prevent intrusion of flames and embers
3. Exposed valley flashings shall be constructed with minimum 26-gauge corrosion-resistant metal installed over minimum 36-inch-wide single layer of No. 72 ASTM cap sheet running full length of valley. (County Building Code 92.1.705A.3)
4. Any roof gutters shall be provided with means to prevent accumulation of leaves and debris. (County Building Code 92.1.705A.4)
5. Skylights shall be tempered glass. (County Building Code 92.1.705A.5)
6. All vents (roof, foundation, combustion-air, etc.) shall comply with the following (County Building Code 92.1.706A.1):
 - ☐ Protected by louvers and 1/8-inch noncombustible, corrosion-resistant mesh
Exception: Approved vents resisting intrusion of flames and embers
 - ☐ Turbine attic vents equipped to allow rotation in only one direction
7. Vents prohibited in eaves, eave overhangs, soffits, or cornices. (County Building Code 92.1.706A.2)
Exception: Approved vents resisting intrusion of flames and embers
Exception: Gable-end vents allowed if located minimum 12 inches below lowest eave/rake projection
Exception: As allowed by building official and local fire authority and per eave details in guidance document PDS #198
8. Detail eaves, soffits, and fascias per guidance document PDS #198. (County Building Code 92.1.706A.3)
9. Specify exterior wall finish complying with **one of the following** (County Building Code 92.1.707A.1):
 - ☐ Noncombustible material (stucco, cement fiber board, masonry, etc.)
Exception: 3/4-inch wood drop siding or 3/8-inch plywood with an underlayment of 1/2-inch fire-rated gypsum sheathing that is tightly butted or taped and mudded **or** other ignition-resistant material approved by the building official
 - ☐ Ignition-resistant material
 - ☐ Heavy timber
 - ☐ Log wall construction (smallest horizontal dimension minimum 6 inches)
10. Enclose underfloor areas to the ground with exterior wall construction per item N.9. (County Building Code 92.1.709A.4.2.2)
11. Specify on window and door schedules exterior windows, exterior glazed doors, glazed openings within exterior doors, and glazed openings within exterior garage doors complying with **one of the following** (County Building Code 92.1.708A.2):
 - ☐ Multi-paned glass with minimum one tempered pane (vinyl frames shall have welded corners and metal reinforcement in interlock area)
 - ☐ Glass block units
 - ☐ Minimum 20-minute fire-rated (provide listing or test report)
12. Specify on door schedule exterior doors complying with **one of the following** (County Building Code 92.1.708A.3):
 - ☐ Exterior surface or cladding of noncombustible or ignition-resistant material
 - ☐ Solid-core wood minimum 1-3/8-inch thick
 - ☐ Minimum 20-minute fire-rated
13. Detail patio cover, carport, and trellis construction complying with all exposed elements comply with **any of the following** (County Building Code 92.1.709A.1):
 - ☐ Noncombustible material
 - ☐ 1-hour fire-rated material
 - ☐ Approved exterior fire-retardant treated wood
 - ☐ Modified heavy timber (minimum 2x tongue-and-groove sheathing, 4x6 rafters/beams, 6x6 posts/columns)
14. Detail deck, balcony, and exterior stair construction complying with the following (County Building Code 92.1.709A.1):
 - ☐ Framing (**any of the following**):
 - o Noncombustible material

- 1-hour fire-rated material
- Approved exterior fire-retardant treated wood
- Modified heavy timber (minimum 4x8 joists/treads, 4x10 or 6x8 beams/stringers, 6x6 posts/columns)
- ☐ Decking and tread material (**any of the following**):
 - Noncombustible material
 - 1-hour fire-rated material
 - Approved exterior fire-retardant treated wood
 - Approved alternative decking material meeting test requirements of County Building Code 92.1.709A.1.4

15. Paper-faced insulation prohibited in attics or other ventilated spaces. (County Building Code 92.1.711A.1)

16. Specify on plans any portion of a fence or other structure within five feet of building shall be constructed per **one of the following** (County Building Code 92.1.712A.1):

- ☐ Noncombustible material
- ☐ Approved exterior fire-retardant treated wood
- ☐ Material meeting same fire-resistive standards as exterior walls of building

O. ELECTRICAL, MECHANICAL, AND PLUMBING REQUIREMENTS

1. Provide adequate natural or artificial lighting in all spaces per CBC 1205.
2. *Note on plans*: "The project will comply with the County of San Diego lighting ordinance."
3. Provide adequate natural or mechanical ventilation of all spaces per CBC 1203 and CBEES 120.1.
4. Building requires the following per CPC Table 4-1:
 - ☐ Unisex restroom
 - ☐ Separate gender restrooms
 - ☐ Drinking fountain
5. Indicate on plans location of mechanical units and water heaters.
6. Specify manufacturer, model, and ICC, UL, WH, or equivalent listing report number – UL and ANSI *standard* numbers are insufficient – demonstrating the following for each prefabricated fireplace, wood stove, or pellet stove (CBC 2111.13.1, CALGreen 4.503.1):
 - ☐ Gas fireplaces are direct-vent sealed-combustion type (applies to new buildings only)
 - ☐ Wood stoves and pellet stoves comply with U.S. EPA Phase II emission limits (applies to new buildings only)
 - ☐ Chimney shrouds are part of the approved fireplace assembly
7. Masonry fireplaces must be constructed per county details (make completed PDS #180 a permanent part of plans) **or** per engineered design with coordinated structural details and calculations. (CBC 2111)

P. ENERGY EFFICIENCY REQUIREMENTS

NONRESIDENTIAL PROJECTS

1. Provide complete energy efficiency compliance documentation demonstrating design compliance with the **2013** California Building Energy Efficiency Standards (CBEES) for nonresidential and hotel/motel buildings. (CBEES 100.0)
Exception: 1 occupancies
Exception: Qualified historic buildings, except lighting compliance per CBEES 140.6(a)3Q required
2. Proposed design shall comply with energy efficiency requirements applicable to climate zone _____. (CBEES 100.1)
3. Existing buildings and their envelopes -- including shell buildings and unconditioned spaces -- occupied and conditioned for the first time shall comply as new construction. (CBEES 100.0(a), CBEES 141.0)
4. Lighting requirements shall apply to unconditioned buildings and spaces. (CBEES 100.1)
5. The following energy efficiency compliance forms shall be completed and made a permanent part of plans (CBEES 10-103):
 - ☐ Mandatory certificates of compliance:
 - NRCC-ENV-01-E: Envelope component approach
 - NRCC-MCH-01-E: Mechanical systems
 - NRCC-MCH-02-E: HVAC dry/wet system requirements
Exception: NRCC-MCH-02-E may be submitted separately and need not be made a permanent part of plans
 - NRCC-MCH-03-E: Mechanical ventilation and reheat
Exception: NRCC-MCH-03-E may be submitted separately and need not be made a permanent part of plans
 - NRCC-MCH-04-E: Required acceptance tests
 - NRCC-MCH-05-E: Requirements for packaged single-zone units
 - NRCC-PLB-01-E: Water heating system general information
 - NRCC-LTI-01-E: Indoor lighting

- NRCC-LTI-02-E: Indoor lighting controls
 - NRCC-LTI-03-E: Indoor lighting power allowance
 - NRCC-LTO-01-E: Outdoor lighting
 - NRCC-LTO-02-E: Outdoor lighting controls
 - NRCC-LTO-03-E: Outdoor lighting power allowances
 - Exception:** NRCC-LTO-03-E may be submitted separately and need not be made a permanent part of plans
 - NRCC-ELC-01-E: Electrical power distribution
 - NRCC-SRA-01-E: Solar-ready areas
 - NRCC-SRA-02-E **or** NRCC-SPV-01-E **or** NRCC-STH-01-E: Minimum solar zone area worksheet **or** solar photovoltaic system **or** solar water heating system
 - NRCC-CXR-01-E: Design review kickoff
 - NRCC-CXR-02-E: Construction documents
 - NRCC-CXR-03-E **or** NRCC-CXR-04-E: Simple HVAC **or** complex mechanical systems
 - NRCC-CXR-05-E: Design review signature page
 - Additional/alternative certificates of compliance:
 - NRCC-ENV-02-E: Fenestration worksheet (required for prescriptive submittals to complete NRCC-ENV-01-E)
 - NRCC-ENV-03-E: Solar Reflectance Index (required for prescriptive submittals using SRI in lieu of emittance/reflectance to complete NRCC-ENV-01-E)
 - NRCC-ENV-04-E: Daylit zone worksheet (required for prescriptive submittals in buildings with three or fewer stories and having enclosed conditioned space > 5000 s.f. directly under a roof with ceiling height > 15 feet and designed lighting density of 0.5 watts per s.f. or greater)
 - NRCC-ENV-05-E: Fenestration certificate label (required for submittals where NFRC label certificates not available)
 - NRCC-ENV-06-E: Area weighted average calculation worksheet (required for prescriptive submittals where envelope features use weighted-area compliance to complete NRCC-ENV-01-E)
 - NRCC-LTI-04-E: Tailored method (required for projects using the tailored method of compliance to complete NRCC-LTI-01-E)
 - NRCC-LTI-05-E: Line-voltage track lighting worksheet (required for projects with line-voltage track or busway lighting)
 - NRCC-LTS-01-E: Sign lighting
 - NRCC-PRC-01-E: Process compliance forms and worksheets
 - NRCC-PRC-02-E: Garage exhaust (required for enclosed parking garages)
 - NRCC-PRC-03-E: Commercial kitchens
 - NRCC-PRC-04-E: Computer rooms
 - NRCC-PRC-05-E: Commercial refrigeration in retail food stores
 - NRCC-PRC-06-E, NRCC-PRC-07-E, **and/or** NRCC-PRC-08-E: Refrigerated warehouses
 - NRCC-PRC-09-E: Laboratory exhaust
 - NRCC-PRC-10-E: Compressed air systems
 - NRCC-PRC-11-E: Process boilers
6. Energy efficiency compliance forms shall be signed by **all of the following** (CBEES 10-103):
- Energy efficiency documentation author
 - Project designer or owner
7. Building orientation indicated on NRCC-ENV-01-E form shall match orientation shown on plot plan. (CBEES 100.1)
8. Glazing areas indicated on NRCC-ENV-01-E form shall match floor plan. (CBEES 100.1)
9. Proposed design as indicated on NRCC-ENV-01-E form shall comply with the following glazing measures:
- Prescriptive (CBEES 140.3(5), CBEES Table 140.3-B):
 - Maximum U-factor:

Exception: 0.47 for replacement glazing per CBEES Table 141.0-A

Exception: Hotel/motel facilities per CBEES Table 140.3-C

Exception: Chromogenic glazing shall comply with CBEES 140.3(a)5B exception

 - Fixed windows: 0.36
 - Operable windows: 0.46
 - Curtainwalls or storefronts: 0.41
 - Glazed doors: 0.45
 - Swinging exterior doors: 1.45
 - Non-swinging exterior doors: 0.70
 - Glass curb-mounted skylights: 0.58
 - Glass deck-mounted skylights: 0.46
 - Plastic curb-mounted skylights: 0.88
 - Maximum Relative Solar Heat Gain Coefficient (RSHGC) per CBEES Table 140.3-B:

Exception: 0.31 for replacement glazing per CBEES Table 141.0-A, with exemption for maximum 150 s.f. of replacement glazing **or** maximum 50 s.f. of added glazing **or** maximum 50 s.f. of added skylight area

Exception: Hotel/motel facilities per CBEES Table 140.3-C

Exception: Window assemblies with built-in shading methods with RSHGC calculated per CBEES Equation 140.3-A

Exception: Maximum RSHGC = 0.56 for windows forming display perimeter on exterior walls of first story

Exception: Chromogenic glazing shall comply with CBEES 140.3(a)5Cexception

 - Fixed windows: 0.25
 - Operable windows: 0.22

- Curtainwalls or storefronts: 0.26
 - Glazed doors: 0.23
 - Glass curb-mounted skylights: 0.25
 - Glass deck-mounted skylights: 0.25
 - Plastic curb-mounted skylights: No limit
 - Minimum Visible Transmittance (VT) per CBEES Table 140.3-B
Exception: Exemption for maximum 150 s.f. of replacement glazing or maximum 50 s.f. of added glazing or maximum 50 s.f. of added skylight area
Exception: Hotel/motel facilities per CBEES Table 140.3-C
Exception: Windows complying with CBEES Equation 140.3-B
 - Fixed windows: 0.42
 - Operable windows: 0.32
 - Curtainwalls or storefronts: 0.46
 - Glazed doors: 0.17
 - Glass curb-mounted skylights: 0.49
 - Glass deck-mounted skylights: 0.49
 - Plastic curb-mounted skylights: 0.64
 - Maximum total glazing area = 40% of gross exterior wall area or 6 feet times display perimeter, whichever is greater
 - Maximum total west-facing glazing area = 40% of gross west-facing exterior wall area or 6 feet times west-facing display perimeter, whichever is greater
 - Maximum skylight area = 5% of gross exterior roof area
10. Proposed design as indicated on NRCC-ENV-01-E form shall comply with the following roof/ceiling insulation measures:
- ❑ Mandatory (CBEES 120.7(a)):
Exception: Alterations where roof is exposed to the roof deck shall comply with minimum insulation requirements of CBEES 141.0(b)2Biii
 - Metal building: Maximum U-factor = 0.098 per applicable CBEES joint appendix table
 - Wood-framed and others: Maximum U-factor = 0.075 per applicable CBEES joint appendix table
 - Insulation shall not be placed on top of a suspended ceiling with removable ceiling panels
Exception: Conditioned spaces with a combined floor area no greater than 2000 s.f. in an otherwise unconditioned building when the average height of the space between the ceiling and roof over these conditioned space is greater than 12 feet
 - ❑ Prescriptive (CBEES 140.3(a)1B, CBEES Table 140.3-B):
Exception: Hotel/motel buildings per CBEES Table 140.3-C
 - Metal building: Maximum U-factor = 0.65 per applicable CBEES joint appendix table
 - Wood-framed and others:
 - **Climate zone 7** projects: Maximum U-factor = 0.067 per applicable CBEES joint appendix table
 - **Climate zone 10, 14, and 15** projects: Maximum U-factor = 0.039 per applicable CBEES joint appendix table
11. Proposed design as indicated on NRCC-ENV-01-E form shall comply with the following wall insulation measures:
- Exception:** Minimum R-13 insulation required in demising partitions between conditioned and enclosed unconditioned spaces per CBEES 110.8(f)
- ❑ Mandatory (CBEES 120.7(b)):
Exception: Alterations shall comply with minimum insulation requirements of CBEES 141.0(b)1B
 - Metal building: Maximum U-factor = 0.113 per applicable CBEES joint appendix table
 - Metal-framed: Maximum U-factor = 0.105 per applicable CBEES joint appendix table
 - Light mass walls (heat capacity ≥ 7 and <15): Maximum U-factor = 0.440 per applicable CBEES joint appendix table for 6-inch or greater hollow core CMU
 - Heavy mass walls (heat capacity ≥ 15): Maximum U-factor = 0.690 per applicable CBEES joint appendix table for 8-inch or greater hollow core CMU
 - Wood-framed and others: Maximum U-factor = 0.110 per applicable CBEES joint appendix table
 - Spandrel panels and glass curtain walls: Maximum U-factor = 0.280 per applicable CBEES joint appendix table
 - ❑ Prescriptive (CBEES 140.3(a)2, CBEES Table 140.3-B):
Exception: Hotel/motel buildings per CBEES Table 140.3-C
 - Metal building:
 - **Climate zone 7** projects: Maximum U-factor = 0.113 per applicable CBEES joint appendix table
 - **Climate zone 10 and 14** projects: Maximum U-factor = 0.061 per applicable CBEES joint appendix table
 - **Climate zone 15** projects: Maximum U-factor = 0.057 per applicable CBEES joint appendix table
 - Metal-framed:
 - **Climate zone 7** projects: Maximum U-factor = 0.098 per applicable CBEES joint appendix table
 - **Climate zone 10, 14, and 15** projects: Maximum U-factor = 0.062 per applicable CBEES joint appendix table
 - Light mass walls (heat capacity ≥ 7 and <15):
 - **Climate zone 7** projects: Maximum U-factor = 0.440 per applicable CBEES joint appendix table
 - **Climate zone 10, 14, and 15** projects: Maximum U-factor = 0.170 per applicable CBEES joint appendix table
 - Heavy mass walls (heat capacity ≥ 15):
 - **Climate zone 7** projects: Maximum U-factor = 0.690 per applicable CBEES joint appendix table
 - **Climate zone 10** projects: Maximum U-factor = 0.650 per applicable CBEES joint appendix table
 - **Climate zone 14 and 15** projects: Maximum U-factor = 0.184 per applicable CBEES joint appendix table
 - Wood-framed and others:
 - **Climate zone 7** projects: Maximum U-factor = 0.110 per applicable CBEES joint appendix table

- **Climate zone 10 and 14** projects: Maximum U-factor = 0.059 per applicable CBEES joint appendix table
 - **Climate zone 15** projects: Maximum U-factor = 0.042 per applicable CBEES joint appendix table
12. Proposed design as indicated on NRCC-ENV-01-E form shall comply with the following raised-floor insulation measures:
- ☐ Mandatory (CBEES 120.7(c)):
 - Exception:** Alterations shall comply with minimum insulation requirements of CBEES 141.0(b)1C
 - Raised mass (minimum 3-inch lightweight concrete over metal deck): Maximum U-factor = 0.269 per applicable CBEES joint appendix table
 - Others: Maximum U-factor = 0.071 per applicable CBEES joint appendix table
 - ☐ Prescriptive (CBEES 140.3(a)4, CBEES Table 140.3-B):
 - Exception:** Hotel/motel buildings per CBEES Table 140.3-C
 - Raised mass (minimum 3-inch lightweight concrete over metal deck):
 - **Climate zone 7 and 10** projects: Maximum U-factor = 0.269 per applicable CBEES joint appendix table
 - **Climate zone 14 and 15** projects: Maximum U-factor = 0.092 per applicable CBEES joint appendix table
 - Others:
 - **Climate zone 7 and 10** projects: Maximum U-factor = 0.071 per applicable CBEES joint appendix table
 - **Climate zone 14 and 15** projects: Maximum U-factor = 0.039 per applicable CBEES joint appendix table
13. Specify on building sections the R-values of the following insulation assemblies – cavity and/or continuous as applicable – as indicated on NRCC-ENV-01-E form:
- ☐ Roof/ceiling
 - ☐ Wall
 - ☐ Raised-floor
 - ☐ Slab-perimeter (if required per performance method)
14. The following nominal framing depths will be required in order to accommodate cavity insulation as indicated on NRCC-ENV-01-E form:
- ☐ Roof rafters: _____ nominal depth to accommodate _____ cavity insulation
 - ☐ Stud walls: _____ nominal depth to accommodate _____ cavity insulation
15. Proposed design as indicated on NRCC-ENV-01-E form shall comply with the following cool roof measures:
- Exception:** Existing roofs with 50% or less **and** 2000 s.f. or less of roof area altered
- ☐ Prescriptive (CBEES 140.3(a)1Ai):
 - Exception:** Hotel/motel facilities per CBEES 140.3(a)1Aii
 - Exception:** If aged solar reflectance value not available from Cool Roof Rating Council, aged value shall be determined by CBEES 110.8(i)2 equation using initial solar reflectance
 - Exception:** Roof areas covered by building-integrated photovoltaic panels or solar thermal panels are exempt
 - Steep-sloped roofs (i.e., greater than 2:12 slope):
 - Minimum thermal emittance = 0.75
Exception: Roofing with minimum SRI = 16 calculated per NRCC-ENV-03-E worksheet
 - Minimum **aged** solar reflectance = 0.20
Exception: Roofing with minimum SRI = 16 calculated per NRCC-ENV-03-E worksheet
 - Low-sloped roofs (i.e., 2:12 or less slope):
 - Exception:** Roof assemblies with thermal mass of minimum 25 psf are exempt
 - Minimum thermal emittance = 0.75
Exception: Roofing with minimum SRI = 75 calculated per NRCC-ENV-03-E worksheet
 - Minimum **aged** solar reflectance = 0.63
Exception: A lesser aged solar reflectance is allowed provided the roof/ceiling assembly meets trade-off values of CBEES 140.3
Exception: Roofing with minimum SRI = 75 calculated per NRCC-ENV-03-E worksheet
 - ☐ Performance (CBEES 110.8(i)):
 - Roofing products not certified by Cool Roof Rating Council shall assume the following values:
 - Exception:** Solar Reflectance Index (SRI) calculated per NRCC-ENV-03-E worksheet may be used as alternative
 - Asphalt shingles: 0.75 thermal emittance, 0.08 **aged** solar reflectance
 - Other roofing products: 0.75 thermal emittance, 0.10 **aged** solar reflectance
16. For projects with cool roofing indicated on NRCC-ENV-01-E form, specify the following cool roof product information on roof plans (CBEES 110.8(i)):
- ☐ Cool Roof Rating Council (CRR) product ID number
 - ☐ Manufacturer brand
 - ☐ Product model
 - ☐ Product color
17. Proposed design as indicated on NRCC-MCH-02-E form shall comply with the following space-conditioning equipment measures:
- ☐ Mandatory (CBEES 110.2(a), CBEES Tables 110.2-A through K):
 - Space-conditioning equipment efficiency:
 - Gas-fired heating equipment: Minimum _____ Annual Fuel Utilization Efficiency (AFUE)
 - Heat pumps: Minimum _____ Heating Seasonal Performance Factor (HSPF)

- Cooling systems: Minimum _____ Seasonal Energy Efficiency Rating (SEER) or minimum _____ Energy Efficiency Rating (EER)
 - ☐ Prescriptive (CBEES 140.4(g)):
 - Electric-resistance heating prohibited
Exception: When electric-resistance heating supplements a system in which at least 60% of annual energy requirement is supplied by site-solar or recovered energy
18. Proposed design as indicated on NRCC-MCH-02-E form shall comply with the following supply- and return-air duct measures:
- ☐ Mandatory (CBEES 120.4(a))
 - Minimum R-8 insulation
Exception: Minimum R-4.2 insulation in indirectly conditioned space
 - ☐ Prescriptive (CBEES 140.4(l)):
 - **HERS verification required** to confirm adequate duct sealing – *provide **large, clear** note on **plot plan**: “HERS verification required. Registered NRCA-MCH-04-H form shall be presented to building inspector in field.” – if **all of the following** apply:*
 - Duct system provides conditioned air to occupiable space for a constant-volume, single-zone, space-conditioning system
 - Space-conditioning system serves less than 5000 s.f. of conditioned floor area
 - Combined surface area of ducts in unconditioned spaces is more than 25% of total surface area of entire duct system
19. Proposed design shall comply with the following indoor lighting measures:
- Exception:** Hotel/motel guestrooms, fire station dwelling areas, dormitory dwelling areas, and senior housing dwelling areas shall comply with residential lighting provisions per CBEES 130.0(b)
- Exception:** Alterations shall comply with CBEES Table 141.0-E
- Exception:** Modifications-in-place shall comply with CBEES Table 141.0-F
- ☐ Mandatory (CBEES 130.1):
 - Delineate **each of the following** day-lit zones on the **lighting plan**:
 - **Sky-lit day-lit zone** (same shape in plan view as skylight): Area under each skylight plus 0.7 times the average ceiling height in each direction from the edge of skylight rough opening, minus any area beyond a permanent obstruction that is taller than one-half the distance from the floor to the bottom of the skylight
 - **Primary side-lit day-lit zone**: Area directly adjacent to vertical glazing of one window head height deep by window width plus 0.5 times window head height, minus any area beyond a permanent obstruction that is 6 feet or taller as measured from floor
 - *Note on **lighting plan**: “All luminaires providing general lighting in sky-lit day-lit zones or primary side-lit day-lit zones shall be controlled independently by automatic daylighting controls.”*
 - ☐ Prescriptive (CBEES 140.3(c), CBEES 140.6(d)):
 - Delineate the following day-lit zones on the **lighting plan**:
 - **Secondary side-lit day-lit zone**: Area directly adjacent to vertical glazing of two window head heights deep by window width plus 0.5 times window head height, minus any area beyond a permanent obstruction that is 6 feet or taller as measured from floor
 - *Note on **lighting plan**: “All luminaires providing general lighting in secondary side-lit day-lit zones shall be controlled independently by automatic daylighting controls.”*
 - In projects with enclosed conditioned/unconditioned spaces greater than 5000 s.f. and directly beneath roof with ceiling heights greater than 15 feet, minimum 75% of floor area – provide calculation on lighting plan – shall be within a **sky-lit day-lit zone** or **primary side-lit day-lit zone**
Exception: Auditoriums, religious facilities, movie theaters, museums, and refrigerated warehouses
Exception: In buildings with unfinished interiors – but not S-1, S-2, F-1, or F-2 occupancies – future enclosed spaces with plans to have floor area of less than or equal to 5000 s.f. or ceiling heights of less than or equal to 15 feet
 - Lighting power density values per CBEES Tables 140.6-A through D – as applicable – shall be used in completing NRCC-LTI-03-E or NRCC-LTI-04-E form
20. *Note on **power plan**: “In office spaces – including associated reception areas, lobbies, conference rooms, kitchenettes, and copy rooms – at least one controlled receptacle shall be installed within 6 feet of each uncontrolled receptacle, or split-wired duplex receptacles shall be installed having one controlled and one uncontrolled receptacle.”*
21. Nonresidential buildings shall comply with the following solar ready measures:
- ☐ Mandatory (CBEES 110.10):
 - Provide roof plan indicating solar zones dedicated for future solar installation per **all of the following**:
 - Located on the roof or overhang of the building subject to this permit **or** on the roof or overhang of another structures on the same lot within 250 feet of the building subject to this permit **or** on covered parking installed as part of this permit
 - Cumulative area of minimum 15% of total roof area of building subject to this permit
Exception: Not required for buildings with permanently installed solar electric system with minimum 1 watt/s.f. DC power rating (based on roof area)
Exception: Buildings with designated solar zone area of minimum 50% of potential solar zone area per CBEES 110.10(b)1B, exception 3
 - Located between 110 and 270 degrees of true north
Exception: Low-sloped (2:12 or less) roofs

- No obstructions – including vents, chimneys, skylights, architectural features, roof-mounted equipment – located within solar zone
- Any obstruction projecting above solar zone shall be located away from solar zone at least two times the height difference between the highest point of the obstruction and the nearest point of the solar zone
Exception: Any obstruction oriented north of all points in the solar zone
- Adequate firefighter access pathways and smoke ventilation clearances per CBC 3111 shall be provided adjacent to – but not within – each solar zone
- Indicate on plans locations/areas dedicated for **all of the following**:
 - Inverters and metering equipment
 - Pathway for routing of conduit from solar zone to point of interconnection with main electrical service panel
 - Pathway for routing of plumbing from solar zone to water-heating system

22. Provide **large, clear** note on **plot plan**: “Properly completed and signed Certificates of Installation and Certificates of Acceptance shall be provided to the inspector in the field.” (CBEES 10-103)

RESIDENTIAL PROJECTS

23. Provide complete energy efficiency compliance documentation demonstrating design compliance with the **2013** California Building Energy Efficiency Standards (CBEES) for low-rise residential buildings. (CBEES 100.0)

24. Proposed design shall comply with energy efficiency requirements applicable to climate zone _____. (CBEES 100.1)

25. The following energy efficiency compliance forms shall be completed and made a permanent part of plans (CBEES 10-103):

- ☐ Mandatory
 - MF1R: Mandatory measures summary
- ☐ Prescriptive certificate of compliance:
 - CF1R-NCB-01-E (applies to newly constructed buildings and additions greater than 1000 s.f.)
 - CF1R-ADD-01-E (applies to additions up to 1000 s.f.)
 - CF1R-ALT-01-E (applies to alterations)
- ☐ Performance certificate of compliance:
 - CF1R-PRF-01-E

26. Energy efficiency compliance forms shall be signed by **all of the following** (CBEES 10-103):

- ☐ Energy efficiency documentation author
- ☐ Project designer or owner

27. Building orientation indicated on CF1R form shall match orientation shown on plot plan. (CBEES 100.1)

28. Glazing areas indicated on CF1R form shall match floor plan. (CBEES 100.1)

29. Proposed design as indicated on CF1R form shall comply with the following glazing measures:

- ☐ Mandatory (CBEES 150.0(q)):
 - Maximum U-factor = 0.58
Exception: Fenestration area of up to 10 s.f. or 0.5% of conditioned floor area – whichever is greater – is exempt
- ☐ Prescriptive (CBEES 150.1(c)3, CBEES Table 150.1-A, CBEES 150.2(a)1, CBEES 150.2(b)1):
 - Maximum U-factor = 0.32
Exception: Up to 3 s.f. of new glazing area in doors is exempt
Exception: Up to 3 s.f. of new tubular skylight area with dual-pane diffusers is exempt
Exception: Maximum U-factor of 0.55 acceptable for up to 16 s.f. of new skylight area
Exception: Maximum U-factor of 0.40 acceptable for up to 75 s.f. of replacement glazing
Exception: Maximum U-factor of 0.55 acceptable for replacement skylights
 - Maximum Solar Heat Gain Coefficient (SHGC) = 0.25
Exception: Window assemblies with built-in shading methods with SHGC calculated per CF1R-WKS-03-E worksheet
Exception: Up to 3 s.f. of new glazing area in doors is exempt
Exception: Up to 3 s.f. of new tubular skylight area with dual-pane diffusers is exempt
Exception: Maximum SHGC of 0.30 acceptable for up to 16 s.f. of new skylight area
Exception: Maximum SHGC of 0.35 acceptable for up to 75 s.f. of replacement glazing
Exception: Maximum SHGC of 0.30 acceptable for replacement skylights
 - Maximum total glazing area = 20% of conditioned floor area
Exception: In additions greater than 700 s.f. and up to 1000 s.f., new glazing area may be larger of 175 s.f. or 20% of addition's conditioned area
Exception: In additions greater than 400 s.f. and up to 700 s.f., added glazing area may be larger of 120 s.f. or 25% of addition's conditioned area
Exception: In additions up to 400 s.f., added glazing area may be larger of 75 s.f. or 30% of addition's conditioned area
Exception: Alterations adding maximum 75 s.f. of glazing are exempt
 - Maximum total west-facing glazing area = 5% of conditioned floor area
Exception: In additions greater than 700 s.f. and up to 1000 s.f., added west-facing glazing area may be 70 s.f.
Exception: In additions up to 700 s.f., added west-facing glazing area may be 60 s.f.
Exception: Alterations adding maximum 75 s.f. of glazing are exempt

30. Proposed design as indicated on CF1R form shall comply with the following roof/ceiling insulation measures:
- ☐ Mandatory per **one of the following** (CBEES 150.0(a)):

Exception: Where existing attic roof space is not large enough to accommodate required R-value, the entire accessible space shall be filled with insulation except 1-inch air space maintained between insulation and roof sheathing

 - o Minimum R-30 between wood framing members

Exception: Minimum R-19 between wood framing members in alterations with rafter roofs (i.e., no attic)
 - o Maximum U-factor = 0.031 per applicable CBEES joint appendix table
 - ☐ Prescriptive (CBEES 150.1(c)1A, CBEES Table 150.1-A):
 - o **Climate zone 7 and 10** projects per **one of the following**:
 - Minimum R-30 between wood framing members
 - Maximum U-factor = 0.031 per applicable CBEES joint appendix table
 - o **Climate zone 14 and 15** projects per **one of the following**:
 - Minimum R-38 between wood framing members
 - Maximum U-factor = 0.025 per applicable CBEES joint appendix table
31. Proposed design as indicated on CF1R form shall comply with the following wall insulation measures:
- ☐ Mandatory per **one of the following** (CBEES 150.0(c)):
 - o Minimum R-13 between 2x4 wood studs

Exception: Existing walls with minimum R-11
 - o Minimum R-19 between 2x6 or larger wood studs

Exception: Existing walls with minimum R-11
 - o Maximum U-factor = 0.102 per applicable CBEES joint appendix table between other 2x4 framing assemblies
 - o Maximum U-factor = 0.074 per applicable CBEES joint appendix table between other 2x6 or larger framing assemblies

Exception: Minimum R-13 acceptable on inside of rim joists in multi-story buildings
 - ☐ Prescriptive (CBEES 150.1(c)1B, CBEES Table 150.1-A):

Exception: Demising walls between conditioned and unconditioned space – e.g., between dwelling and garage – need only meet mandatory requirements

 - o Framed walls per **one of the following**:

Exception: Minimum R-13 between wood studs acceptable in additions 700 s.f. or less per CBEES 150.2(a)1

 - Minimum R-13 between 2x4 wood studs **plus** minimum R-5 continuous
 - Minimum R-15 between 2x4 wood studs **plus** minimum R-4 continuous
 - Maximum U-factor = 0.065 per applicable CBEES joint appendix table
 - o Above-grade mass walls per **one of the following**:
 - Minimum R-13 installed on inside surface of wall
 - Minimum U-factor = 0.070 per applicable CBEES joint appendix table installed on inside surface of wall
 - Minimum R-8 installed on outside surface of wall
 - Minimum U-factor = 0.125 per applicable CBEES joint appendix table installed on outside surface of wall
 - o Below-grade mass walls in **climate zone 7 and 10** projects per **one of the following**:
 - Minimum R-13 installed on inside surface of wall
 - Minimum U-factor = 0.070 per applicable CBEES joint appendix table installed on inside surface of wall
 - Minimum R-5 installed on outside surface of wall
 - Minimum U-factor = 0.200 per applicable CBEES joint appendix table installed on outside surface of wall
 - o Below-grade mass walls in **climate zone 14 and 15** projects per **one of the following**:
 - Minimum R-13 installed on inside surface of wall
 - Minimum U-factor = 0.070 per applicable CBEES joint appendix table installed on inside surface of wall
 - Minimum R-10 installed on outside surface of wall
 - Minimum U-factor = 0.100 per applicable CBEES joint appendix table installed on outside surface of wall
32. Proposed design as indicated on CF1R form shall comply with the following raised-floor insulation measures:
- ☐ Mandatory and prescriptive per **one of the following** (CBEES 150.0(d), CBEES 150.1(c)1C):
 - o Minimum R-19 between wood framing members
 - o Maximum U-factor = 0.037 per applicable CBEES joint appendix table
33. Specify on building sections the R-values of the following insulation assemblies – cavity and/or continuous as applicable – as indicated on CF1R form:
- ☐ Roof/ceiling
 - ☐ Wall
 - ☐ Raised-floor
 - ☐ Slab-perimeter (if required per performance method)
34. The following nominal framing depths will be required in order to accommodate cavity insulation as indicated on CF1R form:
- ☐ Roof rafters: _____ nominal depth to accommodate _____ cavity insulation
 - ☐ Stud walls: _____ nominal depth to accommodate _____ cavity insulation
35. *Note on building sections for **climate zone 14** projects:* "Class II vapor retarder shall be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation." (CBEES 150.0(g)1)
36. Proposed design as indicated on CF1R form shall comply with the following radiant barrier measures:

- ☐ Prescriptive (CBEES 150.1(c)2, CBEES Table 150.1-A):
Exception: Alterations **not** proposing added radiant barrier to qualify for cool roof exception per item N.38
 - o Radiant barrier shall be installed below the roof deck and on all gable-end walls
37. For projects with radiant barrier indicated on CF1R form, *provide **large, clear** note on **roof plan or elevations***: "Radiant barrier is required."
38. Proposed design as indicated on CF1R form shall comply with the following cool roof measures:
- ☐ Prescriptive (CBEES 150.1(c)11, CBEES 150.2(b)1H):
Exception: Additions of 300 s.f. or less
Exception: Alterations replacing 50% or less of roofing
Exception: Areas with building-integrated photovoltaic panels or solar thermal panels
Exception: Roof assemblies with minimum 25 psf thermal mass over roof membrane
 - o Steep-sloped roofs (i.e., greater than 2:12 slope) on **climate zones 10, 14, and 15** projects:
Exception: Existing/modified assemblies with R-38 roof/ceiling insulation **or** radiant barrier **or** no ducts in attic **or** existing ducts insulated and sealed with HERS verification **or** minimum R-4 insulation above roof deck **or** 1-inch air space between top of roof deck and bottom of roofing product **or** installed roofing product with rise-to-width ratio of 1:5 for 50% or more of roofing product width
Exception: If aged solar reflectance value not available from Cool Roof Rating Council, aged value shall be determined by CBEES 110.8(i)2 equation using initial solar reflectance
 - Minimum thermal emittance = 0.75
Exception: Roofing with minimum SRI = 16 calculated per CF1R-WKS-04-E worksheet
 - Minimum **aged** solar reflectance = 0.20
Exception: Roofing with minimum SRI = 16 calculated per CF1R-WKS-04-E worksheet
 - o Low-sloped roofs (i.e., 2:12 or less slope) on **climate zone 15** projects:
Exception: Existing/modified assemblies with no ducts in attic **or** roof deck insulation per CBEES Tables 150.2-A
 - Minimum thermal emittance = 0.75
Exception: Roofing with minimum SRI = 75 calculated per CF1R-WKS-04-E worksheet
 - Minimum **aged** solar reflectance = 0.63
Exception: Roofing with minimum SRI = 75 calculated per CF1R-WKS-04-E worksheet
 - ☐ Performance (CBEES 110.8(i)):
 - o Roofing products not certified by Cool Roof Rating Council shall assume the following values:
Exception: Solar Reflectance Index (SRI) calculated per CBEES 110.8(i)3 may be used as alternative
 - Asphalt shingles: 0.75 thermal emittance, 0.08 **aged** solar reflectance
 - Other roofing products: 0.75 thermal emittance, 0.10 **aged** solar reflectance
39. For projects with cool roofing indicated on CF1R form, specify the following cool roof product information on roof plans (CBEES 110.8(i)):
- ☐ Cool Roof Rating Council (CRR) product ID number
 - ☐ Manufacturer brand
 - ☐ Product model
 - ☐ Product color
40. Proposed design as indicated on CF1R form shall comply with the following space-conditioning equipment measures:
- ☐ Mandatory (CBEES 110.2(a), CBEES Tables 110.2-A through K, CBEES 150.0(m)):
 - o Space-conditioning equipment efficiency:
 - Gas-fired heating equipment: Minimum _____ Annual Fuel Utilization Efficiency (AFUE)
 - Heat pumps: Minimum _____ Heating Seasonal Performance Factor (HSPF)
 - Cooling systems: Minimum _____ Seasonal Energy Efficiency Rating (SEER) or minimum _____ Energy Efficiency Rating (EER)
 - o **HERS verification required** to confirm adequate cooling system airflow and air-handling unit fan efficacy
 - ☐ Prescriptive (CBEES 150.1(c), CBEES Table 150.1-A):
 - o Electric-resistance heating prohibited
 - o For **climate zone 10, 14, and 15** projects with cooling systems, **HERS verification required** to confirm refrigerant charge
 - o For **climate zone 10 and 14** projects with cooling systems, whole-house fan required with **all of the following** specified:
Exception: Additions 1000 s.f. or less and alterations
 - Airflow (assuming minimum 2 cfm per conditioned s.f.)
 - Minimum attic vent area (assuming minimum 1 s.f. net vent area per 375 cfm airflow)
41. For projects with whole-house fan indicated on CF1R form, *provide **large, clear** note on **floor or utility plans***: "Listed whole-house fan required."
42. Proposed design as indicated on CF1R form shall comply with the following supply- and return-air duct measures:
- ☐ Mandatory (CBEES 150.0(m)):
 - o Minimum R-6 insulation
Exception: Ducts enclosed entirely within directly conditioned space and confirmed by HERS verification
 - o **HERS verification required** to confirm adequate duct sealing

Exception: Not required in additions and alterations where existing space-conditioning system equipment remains and less than 40 feet of new or replacement ducts installed in unconditioned or indirectly conditioned space

Exception: Not required in additions and alterations with new/replacement space-conditioning equipment and less than 40 feet of cumulative existing and new ducts in unconditioned spaces

Exception: Not required if ducts previously sealed with HERS verification

Exception: Not required for existing duct systems constructed, insulated, or sealed with asbestos

- ☐ Prescriptive (CBEES Table 150.1-A, CBEES 150.1(c)9, CBEES 150.2(a), CBEES 150.2(b)1D):

- o **Climate zone 14 and 15** projects: Minimum R-8 insulation

Exception: Ducts enclosed entirely within directly conditioned space and confirmed by HERS verification

43. Proposed design shall comply with the following indoor air quality measures:

- ☐ Mandatory (CBEES 150.0(o), ASHRAE Standard 62.2):

Exception: Additions 1000 s.f. or less and alterations:

- o *Note on the plans:* "A mechanical exhaust ventilation system, supply ventilation system, or combination thereof shall be installed for each dwelling unit to provide whole-building ventilation with outdoor air in compliance with ASHRAE Standard 62.2 as adopted by the California Energy Commission."
 - o **HERS verification required** to confirm whole-building ventilation airflow
 - o *Note on the plans:* "An intermittently or continuously operating local mechanical exhaust ventilation system shall be installed in each bathroom with a bathtub, shower, or similar moisture source and in each kitchen in compliance with ASHRAE Standard 62.2 as adopted by the California Energy Commission. Intermittent local exhaust ventilation airflow rates shall be 50 cfm in bathrooms and 100 cfm in kitchens. Continuous local exhaust ventilation airflow rates shall be 20 cfm in bathrooms and 5 air changes per hour in kitchens based on kitchen volume."
 - o *Note on the plans:* "Doors between garage and dwelling shall be gasketed or made substantially airtight with weather stripping."

44. Proposed design as indicated on CF1R form shall comply with the following water heating measures:

- ☐ Mandatory (CBEES 110.3(b)):

- o Water heater efficiency: Minimum _____ Energy Factor (EF) per CBEES Residential Compliance Manual Table 5-1

- ☐ Prescriptive (CBEES 150.1(c)8):

- o Newly constructed buildings shall have water heating system complying with **one of the following**:
 - Single gas or propane storage water heater with input of 75,000 Btu per hour or less
 - Single gas or propane instantaneous water heater with input of 200,000 Btu per hour or less
 - Electric-resistance storage or instantaneous water heater only if natural gas is unavailable and water heater is located within the building envelope and solar water heating system provides 50% of heating load and no recirculation pumps
 - o A second water heater installed as part of an addition shall comply with **one of the following**:
 - Single gas or propane storage water heater with input of 75,000 Btu per hour or less
 - Single gas or propane instantaneous water heater with input of 200,000 Btu per hour or less
 - Electric water heater if no natural gas connection to building and energy factor meeting CBEES Residential Compliance Manual Table 5-1 and no recirculation pumps
 - o A replacement heater shall comply with **one of the following**:
 - Single gas or propane storage water heater with input of 75,000 Btu per hour or less
 - Single gas or propane instantaneous water heater with input of 200,000 Btu per hour or less
 - Electric water heater if no natural gas connection to building and energy factor meeting CBEES Residential Compliance Manual Table 5-1 and maximum 60-gallon storage capacity and no recirculation pumps

45. Proposed design shall comply with the following lighting measures:

- ☐ Mandatory (CBEES 150.0(k)):

- o Kitchens: Lighting fixtures shown on floor or utility plans shall demonstrate at least 50% of total kitchen lighting wattage is high-efficacy
Exception: Up to 50 watts for SFDs less than or equal to 2500 s.f. and up to 100 watts for SFDs greater than 2500 s.f. are exempt from the wattage calculation when all kitchen lighting is controlled by vacancy sensors or dimmers
 - o Bathrooms: Lighting fixtures and switches shown on floor or utility plans shall demonstrate the following:
 - At least one high-efficacy fixture shall be installed in each bathroom
 - All other bathroom lighting shall be high efficacy or controlled by a vacancy sensor
 - o Garages, laundry rooms, and utility rooms: Lighting fixtures and switches shown on floor or utility plans shall demonstrate all lighting is high efficacy and controlled by a vacancy sensor
 - o Rooms other than kitchens, bathrooms, garages, laundry rooms, or utility rooms: Lighting fixtures and switches shown on floor or utility plans shall demonstrate all lighting is high efficacy or controlled by either a vacancy sensor or dimmer
Exception: Closets less than 70 s.f.
Exception: Detached storage buildings less than 1000 s.f. and associated with a residence
 - o Outdoor lighting: Lighting fixtures and switches shown on floor or utility plans shall demonstrate all lighting is high efficacy
Exception: Low-efficacy lighting controlled by a motion sensor and either a photocell or an astronomical time clock

46. Specify on plans the following special features indicated on CF1R form: _____

47. Multi-family low-rise residential buildings shall comply with the following solar ready measures:

- ☐ Mandatory (CBEES 110.10):

- Provide roof plan indicating solar zones dedicated for future solar installation per **all of the following**:
 - Located on the roof or overhang of the building subject to this permit **or** on the roof or overhang of another structures on the same lot within 250 feet of the building subject to this permit **or** on covered parking installed as part of this permit
 - Cumulative area of minimum 15% of total roof area of building subject to this permit
Exception: Not required for buildings with permanently installed solar electric system with minimum 1 watt/s.f. DC power rating (based on roof area)
Exception: Not required for buildings with permanently installed domestic solar water-heating system meeting CBEES 150.1(c)8Ciii
Exception: Buildings with designated solar zone area of minimum 50% of potential solar zone area per CBEES 110.10(b)1B, exception 3
Exception: Not required for buildings with exclusively demand-response thermostats in each dwelling unit **and** meeting the lighting provisions of CBEES 110.10(b)1B, exception 4B
 - Located between 110 and 270 degrees of true north
Exception: Low-sloped (2:12 or less) roofs
 - No obstructions – including vents, chimneys, skylights, architectural features, roof-mounted equipment – located within solar zone
 - Any obstruction projecting above solar zone shall be located away from solar zone at least two times the height difference between the highest point of the obstruction and the nearest point of the solar zone
Exception: Any obstruction oriented north of all points in the solar zone
 - Adequate firefighter access pathways and smoke ventilation clearances per CBC 3111 shall be provided adjacent to – but not within – each solar zone
- Indicate on plans locations/areas dedicated for **all of the following**:
 - Inverters and metering equipment
 - Pathway for routing of conduit from solar zone to point of interconnection with main electrical service panel
 - Pathway for routing of plumbing from solar zone to water-heating system

48. Provide **table or summary on plot plan** indicating HERS verification required for the following energy efficiency measures (CBEES 10-103):

- ☐ Duct sealing
- ☐ Refrigerant charge
- ☐ Air conditioning system airflow
- ☐ Air conditioning unit fan efficacy
- ☐ SEER and/or EER above minimum
- ☐ Whole-building ventilation airflow
- ☐ Building envelope air leakage
- ☐ Quality insulation installation
- ☐ Other:

49. For projects requiring HERS verification, CF1R forms must be registered with a California-approved HERS provider data registry. (CBEES 10-103)

50. Provide **large, clear note on plot plan**: “Properly completed and signed Certificates of Installation (CF2R forms) shall be provided to the inspector in the field. For projects requiring HERS verification, the CF2R forms must be registered with a California-approved HERS provider data registry.” CF2R forms are available at <http://www.sdcounty.ca.gov/pds/bldg/energy-stds.html>. (CBEES 10-103)

51. Provide **large, clear note on plot plan**: “HERS verification required. Properly completed Certificates of Verification (CF3R forms) shall be provided to the inspector in the field. CF3R forms must be registered with a California-approved HERS provider data registry.” CF3R forms are available at <http://www.sdcounty.ca.gov/pds/bldg/energy-stds.html>. (CBEES 10-103)

Q. GREEN BUILDING REQUIREMENTS

1. For residential projects, include in plans notes I.1 through I.15 from attached PDS #081 to indicate compliance with CalGreen mandatory residential requirements. (CalGreen 301.1)
2. Nonresidential CalGreen provisions shall apply to newly constructed buildings, building additions of 1000 square feet or greater, and building alterations with a permit valuation of \$200,000 or above; provisions relevant to additions and alterations shall apply only to the portions of building being added or altered within the scope of the permitted work. (CalGreen 301.3)
3. For projects anticipated to generate visitor traffic, provide permanently anchored bicycle racks per the following (CalGreen 5.106.4.1):
 - ☐ Provide short-term bicycle parking per **all of the following**:
Exception: Additions or alterations adding nine or fewer visitor vehicular parking spaces
 - Located within 200 feet of visitors' entrance
 - Readily visible by passers-by
 - Accommodating number of bicycles equivalent to at least 5% of new visitor vehicular parking spaces added, minimum one two-bike capacity rack
 - ☐ For new buildings with more than 10 tenant-occupants or additions/alterations adding 10 or more tenant vehicular parking spaces, provide long-term bicycle parking per **all of the following**:

- Secure bicycle parking for at least 5% of tenant vehicular parking spaces added, minimum one space
 - Convenient from the street
 - Covered, lockable enclosures with permanently anchored bicycle racks or lockable bicycle rooms with permanently anchored bicycle racks or lockable, permanently anchored bicycle lockers
4. In new projects or additions/alterations adding 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles per the following (CalGreen 5.106.5.2):
 - ☐ Number of spaces per CalGreen Table 5.106.5.2
 - ☐ In same color as parking stall striping, painted characters reading "CLEAN AIR/VANPOOL/EV" such that lower edge of last word aligns with end of stall striping and is visible beneath a parked vehicle
 5. Specify on plans the project will comply with the following indoor water use requirements (CalGreen 5.303):
 - ☐ In new building or additions in excess of 50,000 square feet, separate submeters installed per CalGreen 5.303.1.1
 - ☐ Lavatory faucets, kitchen faucets, wash fountains, metering faucets, and metering faucets for wash fountains shall meet maximum flow rate values in CalGreen Table 5.303.2.3

Exception: Buildings with calculation included on plans demonstrating water use 20% below CalGreen Table 5.303.2.2 baselines
 - ☐ Water closets: Maximum 1.28 gallons per flush
 - ☐ Urinals: Maximum 0.5 gallons per flush
 - ☐ Single showerheads: Maximum 2.0 gallons per minute at 80 psi
 - ☐ Multiple showerheads serving one shower: Maximum 2.0 gallons per minute at 80 psi or shower shall be designed to allow only one shower outlet in operation at a time
 - ☐ Wastewater reduction per CalGreen 5.303.4
 6. Specify on plans the project will comply with the following outdoor water use requirements (CalGreen 5.304):
 - ☐ Water budget for landscape irrigation per CalGreen 5.304.1
 - ☐ Separate submeters installed per CalGreen 5.304.2
 - ☐ Irrigation design per CalGreen 5.304.3
 7. For commercial projects or multifamily residential projects with five or more living units, indicate on plans location of trash collection area(s) with minimum 50% of the area(s) dedicated to recycling. (PRC 42911 and PRC 42910-12)
 8. For new buildings 10,000 square feet or more, submit building commissioning plan **including all of the following** to verify building systems and components meet owner's or owner representative's project requirements (CalGreen 5.410.2, CBEES 120.8):

Exception: Dry storage warehouses of any size

Exception: Within dry storage warehouses, areas under 10,000 square feet used for offices or other conditioned accessory spaces

Exception: Initial tenant improvements under 10,000 square feet

 - ☐ General project information
 - ☐ Commissioning goals
 - ☐ Systems to be commissioned and plans to test per the following:
 - Explanation of original design intent
 - Equipment and systems to be tested, including extent of tests
 - Functions to be tested
 - Conditions under which tests shall be performed
 - Measurable criteria for acceptable performance
 - Commissioning team information
 - Commissioning process activities, schedules, and responsibilities, including plans for commissioning completion
 9. Finish materials shall comply with VOC and formaldehyde limits per CalGreen 5.504.4.
 10. In mechanically ventilated buildings, provided regularly occupied areas with MERV 8 filters for outside and return air. (CalGreen 5.504.5.3)

Exception: An ASHRAE 10% or 15% efficiency filter acceptable for HVAC units with 60,000 Btu/h or less per fan coil, provided energy use of air delivery system is 0.4 W/cfm or less at design air flow
 11. Installed HVAC, refrigeration, and fire suppression equipment shall not contain chlorofluorocarbons or Halons. (CalGreen 5.508.1)
 12. New commercial refrigeration systems installed in retail food stores with 8,000 square feet or more conditioned area shall comply with refrigerant leak provisions of CalGreen 5.508.2.

R. VERTICAL LOAD SUPPORTING SYSTEM REQUIREMENTS

1. Provide a complete roof/floor framing plan.
2. Structure exceeds conventional framing limits of CBC 2308.2. Provide engineered design per *California Building Code*.
3. Framing shall comply with all recommendations made in engineering calculations.

4. Justify the following loads used in design (CBC 1606, CBC 1607):
 - ☐ Roof live load (psf)
 - ☐ Roof dead load (psf)
 - ☐ Floor live load (psf)
 - ☐ Floor live load (concentrated loads)
 - ☐ Floor dead load (psf)
5. Provide complete structural detailing for the project.
6. Cross-reference all framing details with the appropriate plans.
7. Delete all non-applicable details from plans.
8. Specify plywood grade, thickness, panel span rating, and nailing for roof/floor sheathing. (CBC Table 2304.7(3))
9. *Note on plans:* "Plywood shall be continuous under California fill."
10. Specify on framing plans the size, orientation, span, and spacing as applicable for the following structural elements:
 - ☐ Rafters
 - ☐ Ceiling joists
 - ☐ Beams
 - ☐ Floor joists
 - ☐ Headers
 - ☐ Posts
 - ☐ Columns
11. Provide two complete sets of truss drawings and coordinate with roof framing plan. (CBC 2303.4)
12. Identify trusses on roof framing plan by file/ID/sequence number **or** make truss layout a permanent part of plans.
13. Design trusses for bearing at perpendicular interior shear walls.
14. Detail 1/2-inch clearance between trusses and non-bearing walls.
15. Indicate on roof framing plan support for ridge/hip/valley intersections. (CBC 2308.10.4.1)
16. Detail rafter-tie connections at conventionally framed areas with connection nailing per CBC Table 2308.10.4.1.
17. Provide metal straps across ridge beam and rafters.
18. Specify camber requirements and combination symbol for all glue-laminated wood members on plans.
19. *Note on plans:* "A certificate of conformance is required prior to framing inspection for glue-laminated wood members."
20. Specify the make and model number of all proposed truss/beam/joist hangers.
21. Specify size and type (double stud, post, etc.) of support for beams/headers – 4x12 and larger – and girder trusses.
22. Detail all beam-to-post, post-to-beam, and post-to-footing connections.
23. Specify stud size and spacing for all walls. (CBC Table 2308.9.1)
24. Balloon frame walls of rooms with sloping ceilings (rake walls). Specify on plans which walls are balloon framed.
25. Specify on plans fasteners – including nuts and washers – for preservative-treated-wood (in all applications) and fire-retardant-treated-wood (in exterior applications) shall be of hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper. (CBC 2304.9.5)

Exception: Plain carbon steel fasteners in SBX/DOT and zinc borate preservative-treated wood in dry, interior environment

Exception: Fasteners other than nails, timber rivets, wood screws, and lag screws may be mechanically deposited zinc-coated steel

S. LATERAL LOAD RESISTING SYSTEM REQUIREMENTS

1. Provide engineered lateral design per *California Building Code*. Building does not meet the following bracing requirements of CBC 2308:
 - ☐ Building is an irregular structure per CBC 2308.12.6
 - ☐ Shear walls not constructed per acceptable bracing methods of CBC Table 2308.12.4
 - ☐ Shear walls exceed maximum height-to-width ratio per CBC Table 2308.12.4 and do not meet alternative bracing requirements of CBC 2308.9.3

- ☐ Braced wall line spacing exceeds 25 feet per CBC 2308.12.3
 - ☐ Insufficient cumulative shear wall length within braced wall line(s) per CBC Table 2308.12.4
 - ☐ Shear wall spacing within braced wall line(s) exceeds 25 feet per CBC 2308.9.3
 - ☐ Shear walls located more than 8 feet from ends of each wall line per CBC 2308.12.4
 - ☐ Shear walls offset more than 4 feet from braced wall line(s) per CBC 2308.9.3
2. Justify the 0.2-second spectral response acceleration, S_s , and 1-second spectral response acceleration, S_1 , used in the engineering calculations. (CBC 1613.3.1)
 3. Justify the response modification coefficient, R , used in the engineering calculations. (CBC 1613.1)
 4. Justify the redundancy factor, ρ , used in the engineering calculations. (CBC 1613.1)
 5. Justify the wind speed and exposure category used in the engineering calculations. (CBC 1609)
 6. Justify the importance factors, I , used in the engineering calculations. (CBC 1609.1, CBC 1613.1)
 7. Shear walls and lateral load resisting elements shall comply with all recommendations made in engineering calculations.
 8. Specify on framing plans location, type, and length of all shear walls and coordinate with shear-wall schedule.
 9. Shear wall types proposed may not be mixed within the same braced wall line. (CBC 2308.12.4)
 10. Specify nail size and spacing for all shear walls and roof/floor diaphragms. Specify any required blocking. (CBC 2306.2, CBC 2306.3)
 11. The aspect ratio of roof/floor diaphragms shall not exceed the following (AF&PA SDPWS Table 4.2.4):
 - ☐ 3:1 for unblocked wood structural panel diaphragms
 - ☐ 4:1 for blocked wood structural panel diaphragms
 12. The aspect ratio of shear walls and shear wall segments shall not exceed the following (AF&PA SDPWS Table 4.3.4):
 - ☐ 3.5:1 for wood structural panel shear walls with capacity reduced per SDPWS Table 4.3.4 for aspect ratios exceeding 2:1
 - ☐ 2:1 for other shear wall sheathing types
 13. Provide shear-transfer connection details for shear walls (interior and exterior) at roof, floors, and foundation. Cross-reference all shear-transfer details with the appropriate plans. (CBC 2308.3.2)
 14. Make manufacturer's structural detail sheet(s) for engineered shear panels (e.g., Strong-Wall, Hardy Frame, TJ, Shear Max, etc.) a permanent part of the plans.
 15. Provide details for interior shear walls indicating shear transfer from roof/floor diaphragm above.
 16. Provide shear-transfer details at openings in shear walls. (CBC 2305.1.1)
 17. Provide drag straps on each side of bay windows and flush beams where plate lines are interrupted.
 18. Where shear wall forces exceed 350 pounds per foot, all framing members receiving edge nailing from abutting panels shall be minimum 3-inch nominal members or double 2-inch nominal members.
 19. Specify construction of cripple walls per the following (CBC 2308.9.4, CBC 2308.12.4):
 - ☐ Framed with studs equivalent to studs above
 - ☐ If more than 4 feet high, framed with studs required for an additional story
 - ☐ If less than 14 inches high, framed with solid blocking
 - ☐ Considered an additional story and braced per CBC Table 2308.12.4
 20. Specify location/type of all hold-downs on foundation plan (grade-level hold-downs) and framing plan (upper-level hold-downs).

T. FOUNDATION REQUIREMENTS

1. Provide a complete foundation plan.
2. Foundation elements shall comply with all recommendations made in soils/compaction report and engineering calculations.
3. Site inspection revealed presence of expansive soils. Provide soils report with foundation design recommendations.
Exception: Single-story structures at locations where moderately expansive soil conditions exist may comply with the requirements for expansive soil foundation design per form PDS #65 in lieu of providing a soils report
4. Indicate on foundation plan location and size of underfloor vents per the following (CBC 1203.3):
 - ☐ Minimum 1 foot of net vent area required for every 150 square feet of underfloor area (as demonstrated by calculation)

- provided on foundation plan)
 - ☐ Located to provide adequate cross-ventilation to all underfloor areas
- 5. Indicate on foundation plan location of minimum 18-inch by 24-inch access openings to all underfloor areas. (CBC 1209.1)
- 6. Dimension underfloor clearance off grade of 18 inches for floor joists and 12 inches for floor girders **or** specify preservative-treated wood. (CBC 2304.11.2.1)
- 7. Dimension the following vertical clearances for wood framing, sheathing, and siding at exterior walls **or** specify preservative-treated wood (CBC 2304.11.2.2, CBC 2304.11.2.6):
 - ☐ Minimum 8 inches for wood sill plates and sheathing above adjacent natural grade
 - ☐ Minimum 6 inches for wood siding above adjacent natural grade
 - ☐ Minimum 2 inches for wood studs, sheathing, and siding above adjacent concrete slab
- 8. Dimension the following vertical clearances for wood posts and columns **or** specify preservative-treated wood (CBC 2304.11.2.7):
 - ☐ For posts in crawl spaces and supported by concrete piers or metal pedestals:
 - o Minimum 8 inches above natural grade
 - ☐ For posts exposed to weather and supported by concrete piers or metal pedestals:
 - o Minimum 6 inches above natural grade
 - o Minimum 1 inch above concrete slab
- 9. Detail wall sill plate anchorage to foundations per the following (CBC 2308.3.3, CBC 2308.6, CBC 2308.12):
 - ☐ Minimum 1/2-inch-diameter anchor bolts
Exception: Minimum 5/8-inch-diameter anchor bolts required in Seismic Design Category E
 - ☐ Minimum 7-inch embedment into concrete or masonry
 - ☐ Bolts spaced maximum 6 feet on center
Exception: Maximum 4 feet on center for buildings more than two stories in height
 - ☐ Minimum two bolts per sill plate section with one bolt located maximum 12 inches and minimum 4 inches from each end of each section
 - ☐ Steel plate washers per the following provided between sill plate and nut of each anchor bolt:
 - o Minimum 3 inches by 3 inches by 0.229 inch
 - o If standard cut washer placed between plate washer and nut, hole in plate washer may be diagonally slotted with maximum 3/16-inch larger width than bolt diameter and maximum 1-3/4 inch slot length
- 10. Provide footing details specifying all dimensions and reinforcement. Cross-reference all details with foundation plan.
- 11. Provide a step footing detail. (CBC 2308.11.3.2)
- 12. Unless otherwise specified by soils report, dimension minimum 7-foot horizontal distance from bottom leading edge of footings to daylight.
- 13. Provide adequate footings under all bearing walls and shear walls.
- 14. Provide adequate spread footings under posts/columns (where required due to post/column load).
- 15. Specify on foundation plan slab thickness, reinforcement, and moisture barrier. (CBC 1805.2.1)
- 16. Provide details specifying the following for concrete or masonry wall construction:
 - ☐ Maximum overall height
 - ☐ Maximum height of any retained soil
 - ☐ Maximum stem wall height
 - ☐ Wall type (cantilevered or restrained)
 - ☐ Wall material (concrete or masonry) with required material strength
 - ☐ Wall thickness
 - ☐ Vertical and horizontal reinforcement:
 - o Bar size and spacing
 - o Bar position (edge or center) with dimension from face of wall
 - ☐ Footing/key dimensions and reinforcement
 - ☐ Means of restraint (restrained walls)
 - ☐ Drainage system behind walls retaining soil
 - ☐ Waterproofing for walls retaining soil and adjacent to usable space

U. SUPPLEMENTAL ADDITION AND ALTERATION REQUIREMENTS

1. Provide floor plan for existing rooms adjacent to addition/alteration with door sizes, window sizes, and types indicated – including doors/windows to be removed – to verify compliance with light, ventilation, and egress requirements.

2. Provide framing and/or foundation plans for existing structure at _____ to verify existing construction adequate to support proposed added loads.
3. Detail means of achieving positive connection between addition(s) and existing construction at the following:
 - ☐ Plate lines (detail on framing plans)
 - ☐ Footings and slabs (detail on foundation plans)
4. Detail installation of hold-downs and/or anchor bolts in existing foundations. Specify manufacturer and listing number of epoxy, expansion anchors, wedge anchors, etc., as applicable.

V. DISABLED ACCESS – PUBLIC ACCOMMODATIONS AND COMMERCIAL BUILDINGS

1. Provide complete plans, details, dimensions, and notes per the following for disabled access elements serving public accommodations or commercial buildings (CBC Chapter 11B):
 - ☐ Accessibility correction list 1B: Site accessibility and exterior routes of travel
 - ☐ Accessibility correction list 2B: Parking and passenger loading zones
 - ☐ Accessibility correction list 3B: Curb ramps
 - ☐ Accessibility correction list 4B: Ramps
 - ☐ Accessibility correction list 5B: Entrances, exits, and interior routes of travel
 - ☐ Accessibility correction list 6B: Doors and gates
 - ☐ Accessibility correction list 7B: Stairways
 - ☐ Accessibility correction list 8B: Elevators and platform lifts
 - ☐ Accessibility correction list 9B: Toilet facilities
 - ☐ Accessibility correction list 10B: Shower, bathing, and locker room facilities
 - ☐ Accessibility correction list 11B: Drinking fountains
 - ☐ Accessibility correction list 12B: Miscellaneous elements
 - ☐ Accessibility correction list 13B: Alarms (if alarm required per item H.3)
 - ☐ Accessibility correction list 14B¹ - 14B⁸: Occupancy/use-specific disabled access requirements
 - ☐ Accessibility correction list 15B: Existing and historical buildings

W. DISABLED ACCESS – MULTI-FAMILY HOUSING

1. Provide complete plans, details, dimensions, and notes per the following for disabled access elements serving public accommodations or commercial buildings (CBC Chapter 11B):
 - ☐ Accessibility correction list 1A: Code applicability, site accessibility, and exterior routes of travel
 - ☐ Accessibility correction list 2A: Parking facilities
 - ☐ Accessibility correction list 3A: Curb ramps
 - ☐ Accessibility correction list 4A: Ramps
 - ☐ Accessibility correction list 5A: Entrances, exits, and interior routes of travel
 - ☐ Accessibility correction list 6A: Doors and gates
 - ☐ Accessibility correction list 7A: Stairways
 - ☐ Accessibility correction list 8A: Elevators and platform lifts
 - ☐ Accessibility correction list 9A: Common-use toilet facilities
 - ☐ Accessibility correction list 10A: Common-use shower, bathing, and locker room facilities
 - ☐ Accessibility correction list 11A: Drinking fountains
 - ☐ Accessibility correction list 12A: Miscellaneous elements
 - ☐ Accessibility correction list 13A: Alarms
 - ☐ Accessibility correction list 14A: Common-use amenities
 - ☐ Accessibility correction list 15A: Dwelling units